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SERIAL NUMBER	FILING DATE	FIRST NAMED APPLICANT	ATTORNEY DOCKET NO.
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07/912,005 07/10/92 BURR

R 3390-2030

EXAMINER

BOLLINGER, D

ART UNIT

PAPER NUMBER

GREGOR N. NEFF  
C/O CURTIS, MORRIS & SAFFORD  
530 5TH AVE.  
NEW YORK, NY 10036

3101  
DATE MAILED:

15

### EXAMINER INTERVIEW SUMMARY RECORD

09/14/92

All participants (applicant, applicant's representative, PTO personnel):

(1) David Bollinger (3) Mr. Robert Burr  
(2) Mr. Gregor Neff (4) \_\_\_\_\_

Date of Interview 8/26/92

Type: ☐ Telephonic ☒ Personal (copy is given to ☐ applicant ☒ applicant's representative).

Exhibit shown or demonstration conducted: ☐ Yes ☒ No. If yes, brief description: \_\_\_\_\_

Agreement ☐ was reached with respect to some or all of the claims in question. ☒ was not reached.

Claims discussed: Claims of record.

Identification of prior art discussed: Art of record.

Description of the general nature of what was agreed to if an agreement was reached, or any other comments: Discussed the combination

of Groves & Klee '935. Applicant present material showing  
commercial success. The Examiner indicated that filing a declaration  
under 37 CFR 1.132 showing commercial success by presentation of such  
material would be favorably considered.

The Examiner also pointed out that claims 31 & 33 depend from  
cancelled claim 26.

(A fuller description, if necessary, and a copy of the amendments, if available, which the examiner agreed would render the claims allowable must be attached. Also, where no copy of the amendments which would render the claims allowable is available, a summary thereof must be attached.)

Unless the paragraphs below have been checked to indicate to the contrary, A FORMAL WRITTEN RESPONSE TO THE LAST OFFICE ACTION IS NOT WAIVED AND MUST INCLUDE THE SUBSTANCE OF THE INTERVIEW (e.g., items 1-7 on the reverse side of this form). If a response to the last Office action has already been filed, then applicant is given one month from this interview date to provide a statement of the substance of the interview.

☐ It is not necessary for applicant to provide a separate record of the substance of the interview.

☐ Since the examiner's interview summary above (including any attachments) reflects a complete response to each of the objections, rejections and requirements that may be present in the last Office action, and since the claims are now allowable, this completed form is considered to fulfill the response requirements of the last Office action.

David H. Bollinger  
Examiner's Signature

PTOL-413 (REV. 1-84)

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PATENT  
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Applicant : Robert L. Burr  
Serial No. : 07/912,005  
Filed : July 10, 1992  
For : TICKET DISPENSER MACHINE AND METHOD

#16  
10-14-92

DECLARATION UNDER RULE 132  
(37 C.F.R. §1.132)

Robert L. Burr hereby declares and states:

1. He is the inventor in the above-identified patent application. He also is President and Chief Executive Officer of Lottery Enterprises, Inc. ("LEI"), 7320 Convoy Court, San Diego, California 92111. He has personal knowledge of the facts stated in this Declaration.

2. LEI is making and selling lottery ticket dispensers using the invention disclosed and claimed in this patent application. Specifically, LEI sells the "ITR 7000" line of lottery ticket dispensers shown in Exhibits A, B, C and D which are attached to this Declaration.

3. Exhibit A is a photograph of a four-window table-top model of the ITR 7000 dispenser, each window displaying tickets from a different instant-winner lottery ticket game. A string of tickets is driven downwardly past each window by an electric motor drive system when the customer inserts a bill into the machine and presses the button below the window.

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4. Exhibit B is a floor-model, four-window dispenser shown in a typical installation as part of the Virginia Lottery system.

5. Exhibit C is a four-page brochure entitled "ITR®-7000 Instant Ticket Retailer". It shows an eight-window floor model of the ITR-7000 dispenser on the cover, as well as two-window and four-window models.

6. Exhibit D is a booklet entitled "LEI Company Profile" printed July 18, 1992. The last four pages of this booklet comprise a copy of Exhibit C.

7. Exhibit E is a copy of a brochure showing the "ITR 5000" Instant Ticket Retailer" sold by Lottery Concepts International, Inc., a predecessor of LEI.

8. Exhibit F is a copy of a recent issue of a San Diego, California newspaper reporting on the award of a substantial contract for purchase of ITR 7000 machines from LEI.

9. As it is explained on the sixth page of Exhibit D, the LEI Company Profile, the ITR 7000 machine was preceded by the ITR 5000 and the ITR 6000 machines.

10. The ITR 5000 had no windows. IT was not successful. It produced little or no increase in sales over prior manual dispensing methods, and was not ordered by any lottery system.

11. The ITR 6000 was the first model which had windows. This machine is the one shown in the drawings of this

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patent application. The windows, with the tickets moving past them while being dispensed, proved to be a major improvement. The sales of tickets from a vending machine such as that shown in the patent application drawings showed substantial increases over sales using prior methods. However, the dispensing mechanism needed revision to make it simpler, more compact and reliable.

12. In the ITR 7000 machine, the windows feature from the ITR 6000 were kept, but the dispensing mechanism was replaced and improved. The ITR 7000, like the ITR 6000, has a housing with at least one window through which tickets can be seen but not touched by a person outside the housing. The ITR 7000 has electrically-powered means for moving a continuous strip of the tickets past the window and dispensing a pre-determined number of them to an operator. The windows continued to be a major factor in the improved sales of the dispenser as compared with prior methods.

13. As it is explained on the third page of Exhibit D, the Company Profile, the ITR 7000 went into production in June of 1990. Subsequently, tests were performed on the machines by a number of state lottery systems in a substantial number of states. As it is explained on page four of Exhibit D, the tests showed that the ITR 7000 increased sales by from 2 to 10 times over the prior sales methods. A summary of some of the tests conducted is given on page five of Exhibit D.

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14. Field tests of the ITR 7000 started in ~~the~~ Virginia in September of 1990. In March 1991, the Virginia Lottery awarded LEI a contract to supply 2,000 units at a cost of more than \$4,000 each. WJG  
9/25/92

15. The results of tests conducted on behalf of the Virginia Lottery by Scientific Games, Inc., an independent organization, to determine the sales increases produced by the ITR 7000 in use in Virginia are shown on page seven of Exhibit D. The average sales increase achieved was 186.5 percent.

16. The results of similar tests conducted by the Washington Lottery and the Pennsylvania Lottery are shown on pages eight and nine of Exhibit D. Those tests also showed very substantial sales gains over prior methods.

17. Subsequent to the contract award by the Virginia Lottery, contracts have been awarded to LEI to supply the ITR 7000 machines to the state lotteries in Delaware, Colorado, Vermont and California. The numbers of units to be ordered in Delaware, Colorado and Vermont is open-ended, with some of the initial quantities being set forth on page 3 of Exhibit D.

18. The California order alone requires LEI to deliver around fifteen million dollars worth of the machines by November 1, 1992.

19. When LEI started business, it had no sales of any product. The ITR 7000 was its first and only product. Its sales have been achieved with only relatively modest expenditures for

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advertising, publicity and selling, due to the lack of funds by our fledgling enterprise. It is my belief that any commercial success we have had is due mostly to the merits of the ITR 7000 equipment.

20. I also believe that, although the success of the ITR 7000 is not due exclusively to the use of the windows invention of this patent application, the windows invention has played a major role in such success. The feature frequently is mentioned by state lottery personnel as an important feature, and field tests, starting with the ITR 6000, consistently have shown that the windows invention attracts attention, gives confidence and information to the ticket buyer, and greatly enhances the chances of convincing the customer to make what is basically an impulse purchase.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may

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jeopardize the validity of the application or any patent issued  
thereon.

Date: Sept 25, 1992

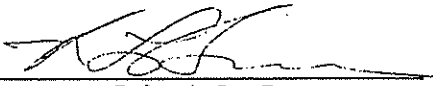
  
Robert L. Burr

Exhibit A



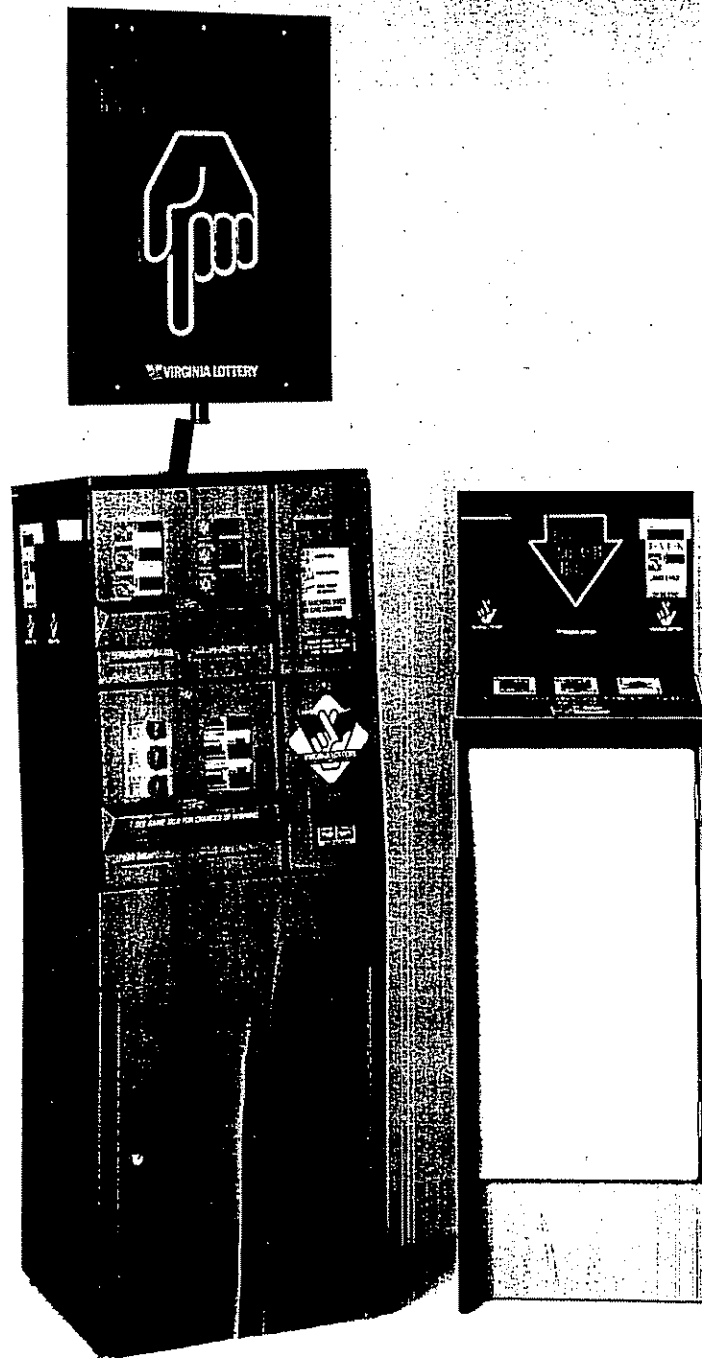


Exhibit B

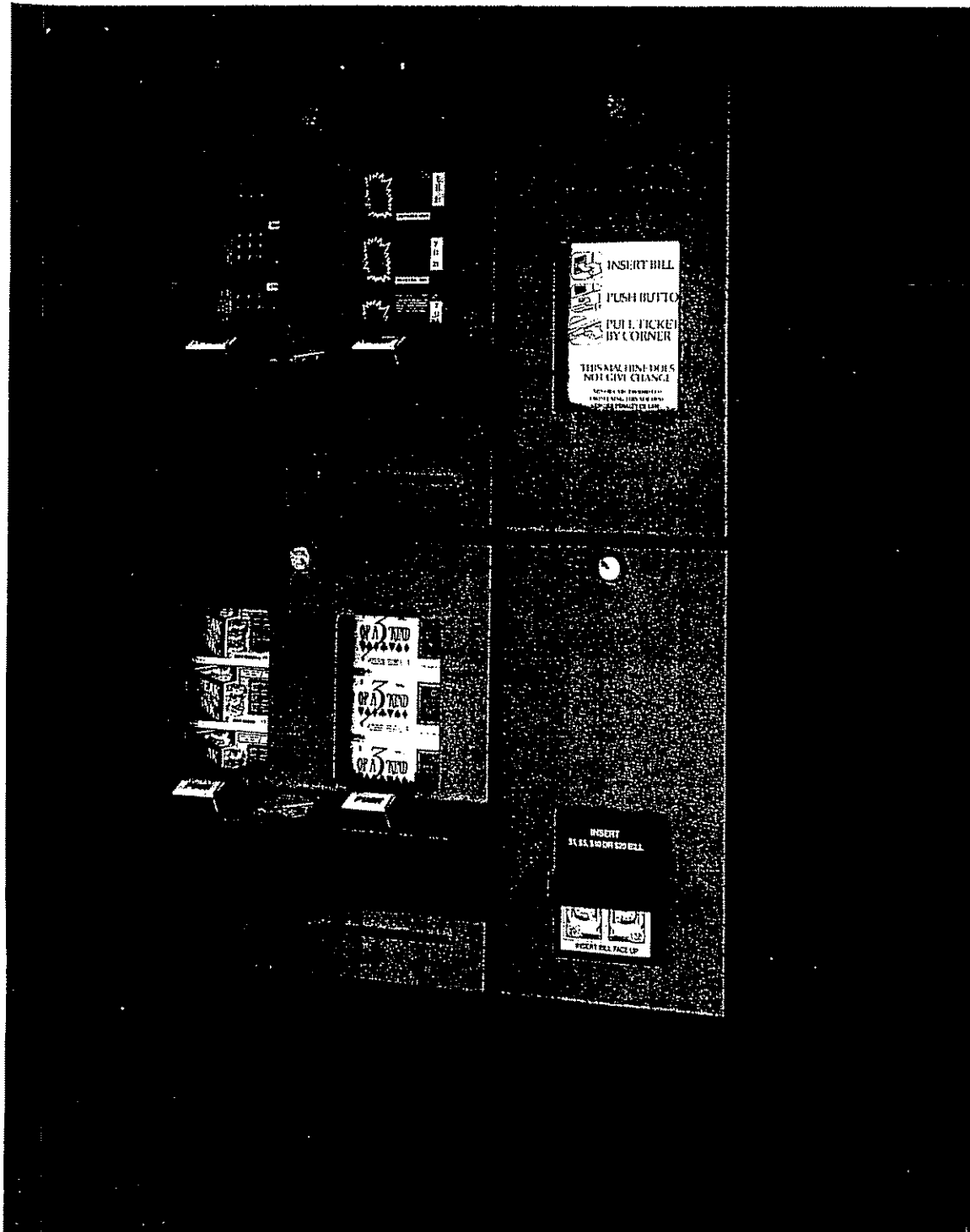


Exhibit C



*The Leader In Instant Ticket Dispensing Technology*

# **ITR™-7000 INSTANT TICKET RETAILER**



## A TROUBLE-FREE DISPENSER WITH SPLIT-SECOND SPEED.

**T**he consumer-activated INSTANT TICKET RETAILER (model ITR™-7000) opens up uncharted marketing opportunities for retailing instant lottery tickets. The ITR™-7000 is designed to streamline the marketing of instant lottery tickets by opening up new markets which heretofore have not been available to lotteries. Specifically, these markets can be identified as those where sales now exist but at a level far below potential (typically food chain stores, liquor stores, etc) and locations where potential exists but instant tickets are not being offered for sale (private clubs, bars, malls, etc).

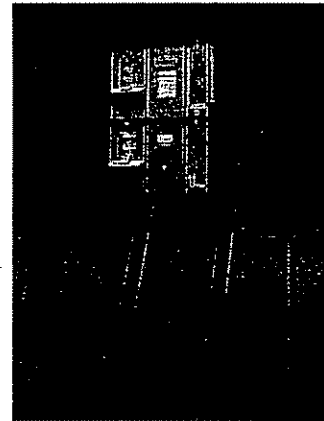
The ITR™-7000 is simple to operate. The customer inserts a dollar bill, in any denomination of one, five, ten or twenty dollars and makes a selection from one to eight separate games. It's simple. It's convenient. And it's secure. Additionally, each ITR™-7000 dispensing unit stores up to 3,000 tickets for a maximum of 24,000 tickets per machine. This coupled with the fact that it keeps track of

all the accounting and inventory of each game and tied in with the LEI FILE SERVER™ will alert the lottery in ample time to replenish ticket stock when it becomes low and will make distribution of tickets routine.

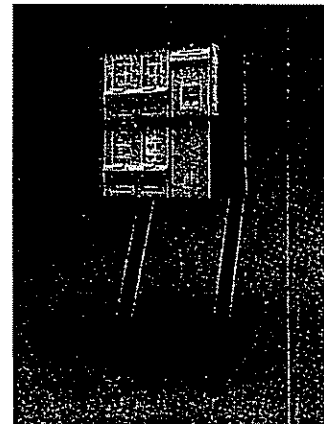
The ITR™-7000 has an optional attention-getting LED scrolling sign to attract impulse buyers. The sign is loaded from the LEI FILE SERVER™ at Lottery headquarters or other remote locations to promote special games or winning jackpots.

The ITR™-7000 is available in four convenient models. All include standard bill acceptors and/or optional coin acceptors (see -C). the -2 houses two dispensers, the -4 houses four dispensers, the -6 houses six dispensers and the -8 houses eight dispensers. All models are available as counter tops, wall mounts or stand-alone terminals. The stand-alone models offer two options: Twin-L legs or security storage cabinet.

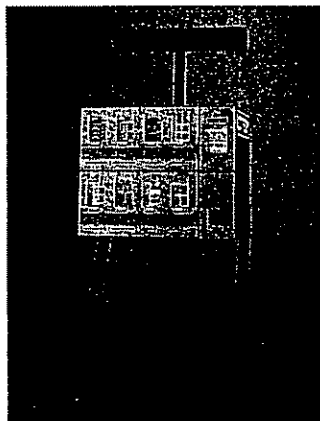
Quite simply, LEI's ITR™-7000 will revolutionize the way you'll market Instant Lottery Tickets.



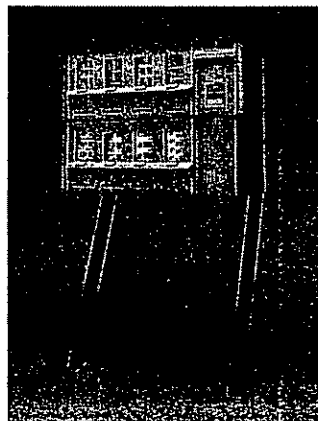
ITR™-7000-2-C  
Shown with optional coin acceptor



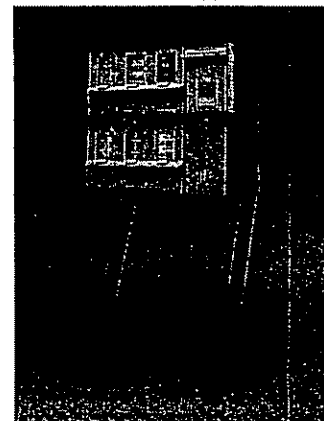
ITR™-7000-4



ITR™-7000-8-S  
Shown with optional LED display



ITR™-7000-6



ITR™-7000-8



## ITR™-7000 ADVANTAGES

### TO THE LOTTERY

- Increase Sales
- Security
- Multi-game Sales (up to 8 games/unit)
- Daily Sales Information

BY: Agent  
Classification  
Geographical

- LED Sign Downloadable
- Total Accounting And Inventory Control
- Increased Efficiency And Cost Effective Marketing

FOR: Promotion  
Incentive Programs  
Advertising

- Messages On Terminal Downloadable From Central Computer

FOR: Individual Agents or  
all the Agents

- Complete Close-out Of Game
- Total Control Of System (via dial-up communication)
- Real Time Clock (allows automatic communications)
- Information Contained In ITR™
- Battery Backup (in the event of power loss)
- Daily Inventory And Sales Reports (insure ticket availability)
- No Out Of Stock Situations
- Opportunity For New Sales Outlets

### TO THE AGENT

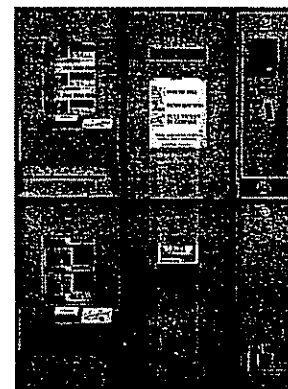
- Increase Sales
- Security
- Total Accounting And Inventory Control
- Reports  
Current day sales  
Daily sales for two days  
Weekly sales for two weeks  
Invoices

- Automatic Reordering Of Tickets
- Point Of Sale Advertising
- Hard Copy Sales Reports
- RS232 Port For Central Control
- Ability To Sell Tickets Anywhere
- Ergonomically Designed Unit
- Automatic Agent ID Imprint (optional)

- Easy To Operate
- Consumer Oriented
- Holds 3,000 Instant Tickets For Each Game
- Small Footprint
- Does Not Require A Sales Clerk
- Contains Its Own Cash Compartment
- Double Security Locks
- Heavy Steel Construction
- Multi-game Sales (up to 8 games unit)

### TO THE CONSUMER

- Availability
- Convenience
- Ability To Purchase A Ticket Anywhere
- Ease Of Purchase
- Choice Of Instant Lottery Game



### ITR™-7000 VERSATILITY

Standard bill acceptor with installation of optional coin acceptor greatly enhances ticket buyer convenience by offering a multitude of currency choices.

## SPECIFICATIONS

	Height	*Width	Depth
ITR™-7000-2	27.25"	15.25"	18.0"
ITR™-7000-4	27.25"	21.25"	18.0"
ITR™-7000-6	27.25"	27.25"	18.0"
ITR™-7000-8	27.25"	33.25"	18.0"

115 or 240V AC 47 or 60 Hz 2 Amp

\*Optional coin acceptor [-C] adds 4.0" to overall width.



### ITR™-7000 VERSATILITY

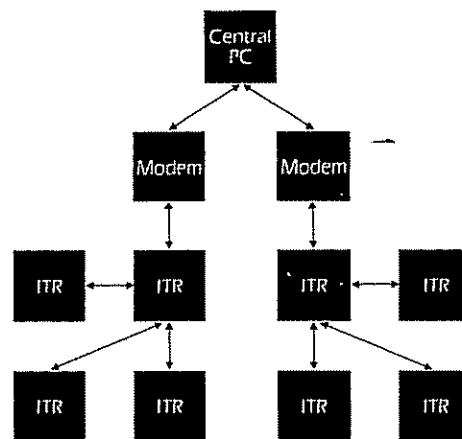
Accepts any size tickets with widths from 2" to 4" and lengths from 1 1/4" to 6".

## LEI FILE SERVER™

As depicted in the diagram, every ITR™-7000 is capable of interrogating over thirty other ITR™-7000's via its smart modem. This feature permits the central PC (at Lottery headquarters or other remote locations) to collect all of the sales and inventory information from any one city or local with a single phone call, thus reducing the necessity of tying up a large number of 800 or WATS lines. Considering connect time, it is estimated that a PC with dual modems can interrogate over 21,000 ITRs™ in a seven hour time span. All communications are done on a dial-up basis eliminating costly dedicated phone lines.

Timely reports are broken down into agent categories, i.e. convenience stores, bars, nightclubs, etc, and also by geographic location. This permits the lottery to pinpoint advertising, agent training or special promotions.

In addition, special messages may be automatically downloaded to the optional LED sign during the interrogation of the ITR™. Messages may be sent to specific agents or to the entire state.



### Lottery Enterprises, Inc.

Corporate Headquarters  
7372 Convey Court  
San Diego, California 92111  
Tel. (619) 569-5266 Fax (619) 569-9157  
Toll Free (800) 879-ITR7  
(800) 879-4877

East Coast Office  
74 Branch St. #17  
Scituate, Massachusetts 02066  
Tel. (617) 545-4829 Fax (617) 545-4477



The Leader in Instant Ticket Dispensing Technology

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Exhibit D



***COMPANY***

***PROFILE***

**CORPORATE  
HEADQUARTERS:** **LOTTERY ENTERPRISES, INC.**  
7320 Convoy Court.  
San Diego, CA 92111 USA  
Phone: (619) 569-5266  
Fax: (619) 569-9157  
Tech. Support (800) 487-7009

**EAST COAST  
OFFICE:** **LOTTERY ENTERPRISES, INC.**  
74 Branch Street # 17  
Scituate, MA 02066 USA  
Phone: (617) 545-4829  
Fax: (617) 545-4477

**VIRGINIA OFFICE:** **LOTTERY ENTERPRISES, INC.**  
1206 Willard Road  
Suite 103  
Richmond, VA 23294 USA  
Phone: (804) 755-8702  
Fax: (804) 672-7661

**KEY PERSONNEL:** **Robert L. Burr, President & CEO**  
**John F. Winchester, Executive Vice President**  
**Catherine Winchester, Director of Marketing, Western Region**  
**John L. Winchester, Director of Marketing, Eastern Region**  
**Robert Cooley, Director of Research and Development**  
**Don Wesser, Director of Manufacturing**  
**Leon Ostapiej, Director of Quality**  
**Paul D. Alvarez, Technical Manager, Western Region**  
**Herb Herrmann, Director of Engineering**  
**William McAdaragh, Service Manager, Virginia Operations**

Lottery Enterprises, Inc. has been manufacturing the ITR™-7000 series Instant Ticket Dispensing machines since June 1990. The ITR™-7000 series is a third generation machine, preceded by the ITR™-7000 and ITR™-6000 terminals which have been in various field tests since 1986. For the Oregon Lottery, we are proposing our fourth generation model, the ITR™-7500.

Manufacturing facilities are located at the corporate address. The top management of the company has been involved in design concepts, engineering and production of vending machines since 1976. This has included video amusement machines, video poker, keno and quarter horse gaming machines. Since 1985, the management has exclusively designed, manufactured, marketed and field tested lottery instant ticket vending machines.

LEI has 292 man years experience in the Lottery Industry, high technology field and the vending/gaming machine industry.

Lottery Enterprises, Inc. was incorporated in March of 1990. Production of the ITR™-7000 series Instant Ticket Retailer terminal began in June of 1990.

- Field testing commenced in September 1990 resulting in a contract with the **Virginia Lottery** on March 25, 1991 for the installation of 2,000 ITRs™.
- LEI was awarded the contract to supply the **Delaware Lottery** with the ITR™-7000 system. Fifty (50) terminals were delivered in June. An Additional fifty (50) are scheduled for July with follow-up delivery as required.
- In May 1992 the **Colorado Lottery** purchased terminals for installations in casinos in the gaming towns of Black Hawk and Cripple Creek and other age-controlled environments.
- In June 1992 LEI was informed of a successful bid with the **Vermont Lottery**. The first one hundred (100) units will be delivered in August, 1992.
- LEI was notified in July 1992 as being the apparent successful winner for implementing 2,000 ITVMs for the **California Lottery**, with an option on an additional 4500 terminals.

- ✓ Active negotiations are continuing with Maine, Indiana, Washington D.C. and Kansas.
- ✓ A three month, 20 unit test recently completed in Western Canada in February of 1992.
- ✓ A 20 unit test began in July 1992 with the Ontario Lottery.
- ✓ Testing in Iceland began in January of 1992. Australia, Spain, Czechoslovakia, England are scheduled for field test in 1992.

The ITR™-7000 series of Instant Ticket Retailers have been proven to increase tickets sales from 2 to 10 times in those locations which sold lottery tickets either over the counter or manually such as supermarkets and convenience stores. Additionally, it has opened up new markets which heretofore have not been available to lotteries. Specifically, these markets can be identified as private clubs, bars, airports, restaurants, hospitals and shopping malls.

The following is a breakdown of tests conducted by LEI with Lotteries around the world:

NAME OF LOTTERY OR ORGANIZATION	NUMBER OF ITRs™	TEST BEGAN	TEST ENDED
British Columbia	2	9/91	1/92
California	40	3/92	5/92
Safeway (CA)	2	7/91	9/91
Colorado	3	4/91	7/91
Delaware	4	7/91	11/91
Washington DC	3	10/90	11/90
Iceland	1	1/91	present
Idaho	4	10/90	12/90
Hoosier Lottery	6	9/90	3/91
Marsh Supermarkets (IN)	4	2/91	8/91
Village Pantry (IN)	4	2/91	3/91
Kroger Supermarkets (IN)	3	4/92	5/92
Kansas	4	6/91	9/91
Kentucky	6	1/91	4/91
Maine	4	11/90	8/91
Maryland	10	2/91	4/91
Massachusetts	4	10/91	11/91
Minnesota	1	2/92	6/92
New Jersey	2	2/92	4/92
Ohio	6	10/90	1/91
Ontario	15	7/92	present
Pennsylvania	3	5/92	7/92
Vermont	14	9/90	6/91
Washington State	3	12/91	3/92
West Virginia	6	11/91	1/92
Western Canada	20	2/92	5/92

All of these tests were very successful; sales increased from two to ten times over previous sales figures.

## EVOLUTION OF THE ITR™

The administration of the Instant Ticket product line has been and continues to be labor intensive, whereas the other product lines offered by the lotteries, namely Lotto, Pick 3/4, by their very nature are technologically advanced. In order to reduce the amount of labor dedicated to the Instant Ticket product line and thus streamline and mechanize the administration of the games, an intensive market research project was initiated by Lottery Enterprises, Inc. personnel in April 1985. Lottery personnel, including Directors, lottery agents and consumers in the United States and Canada were interviewed. The result of our research indicated that the most pressing problems arise in the following areas: accounting, security, agent motivation, marketing, relevant sales statistics and availability of the product. With this information in mind, the Instant Ticket Retailer was designed and manufactured. Each of the problem areas were addressed and became part of the Instant Ticket Dispenser.

Our first Instant Ticket Dispenser, the ITR™-5000 series was agent operated and was field tested in Vermont. It became clear immediately that this was not what the lottery, agent and consumer wanted. The consumer wanted to see the product, and have the ability to activate the terminal and have a choice of games. The agent and lottery concurred and in addition wanted a secure cash drawer.

The results of the initial field research led to the ITR™-6000 series. This series incorporated all of the suggestions gleaned from the customer, lottery and lottery agent. The 6000 series was designed to permit viewing of the tickets through a window and handle up to four games. This series was larger and the tickets being dispensed were cut and dropped into a cup; but it was very difficult to maintain the proper bursting measurement, causing tickets to be mutilated. In addition, it was discovered that the majority of consumers wanted to be able to buy an uncut string of tickets and separate them.

The latest design, the ITR™-7000 has many advantages and improvements over the 6000. These include:

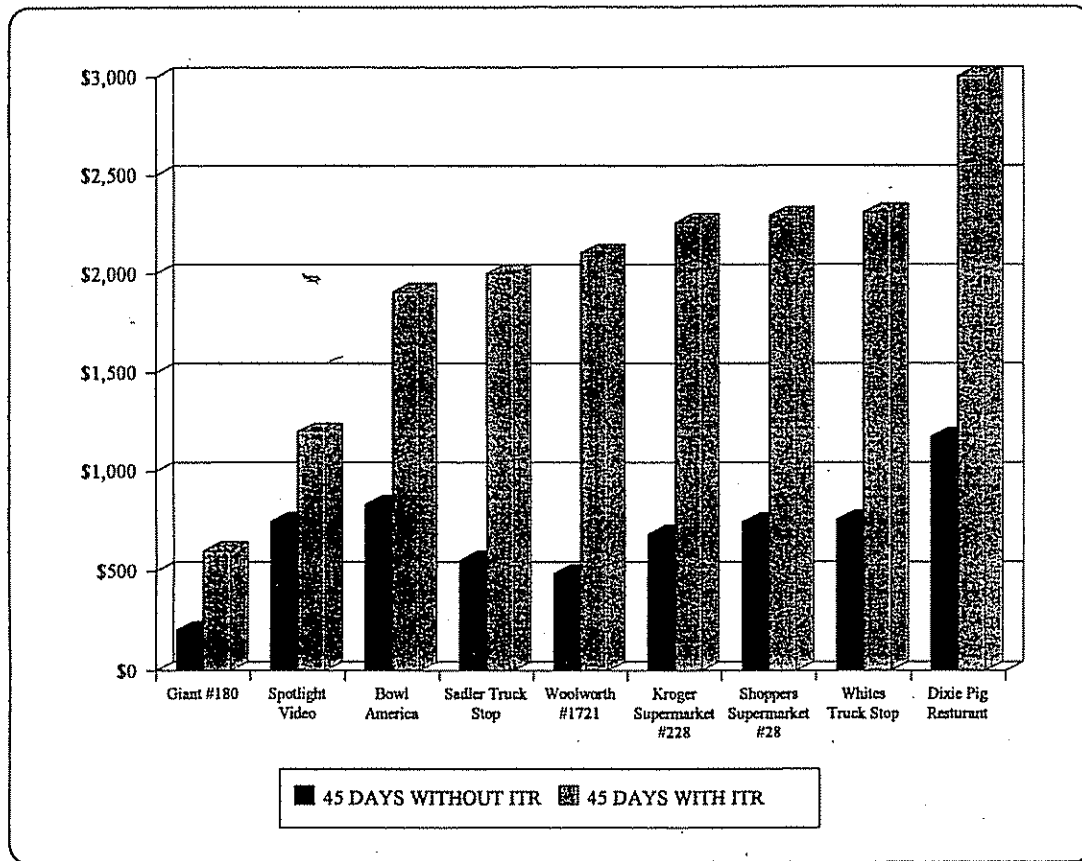
- ✓ The 7000 series machines are half the size of the 6000 series. The largest capacity 8-dispenser machine can securely store 24,000 instant tickets in half the size of the 6000 series 4-dispenser machine.
- ✓ The 7000 takes up less floor space, to the delight of retailers.
- ✓ The 7000 has fewer moving parts.
- ✓ Loading and unloading of tickets are automatic.
- ✓ No confusing keypad entries are required from the customer. They simply press the appropriate button to dispense their tickets.
- ✓ Tickets are dispensed to the consumer who can separate one or a group of tickets, hence, a more reliable method and consumer appeal.
- ✓ The 7000 series permits up to eight different games.
- ✓ Automatic printing of sales and inventory reports on a daily basis.
- ✓ The 7000 procedures are easier for the agent to learn. Training time is minimal.
- ✓ The data input menus have been streamlined to make it easier for the agent to do routine procedures.
- ✓ All sales reports are printed at the push of a button from the Main Menu. Stepping through confusing menu options to print reports has been eliminated.
- ✓ Software upgrades are easier to install, service technicians do not need to be called out. Some agents using the 7000 are doing it themselves now.
- ✓ Diagnostic routines are much more advanced providing faster and more reliable troubleshooting operations.
- ✓ A modular design provides quick and simple upgrades and module replacements.
- ✓ The 7000 series can easily be customized to individual needs of agents.

**UNIQUE FEATURES OF THE ITR™-7000:**

- ✓ Ability to store and dispense up to eight different games/ 3000 tickets per dispensing unit.
- ✓ Automatic printing of daily sales/inventory report at midnight or at the time the agent selects.
- ✓ Audit trail report
- ✓ Dual processors insuring reliability
- ✓ High speed dial-up communications procedures
- ✓ Programmable attract mode
- ✓ Daylight Savings Time setting that will automatically adjust the system time when necessary.
- ✓ Programmable CLERK ID numbers. This allows the manager to monitor all access to the machine, with hard copy reports showing the date and time each clerk accessed the machine.
- ✓ Hard copy report of lifetime sales from the machine. This figure can only be changed by technician or lottery personnel with proper access code.



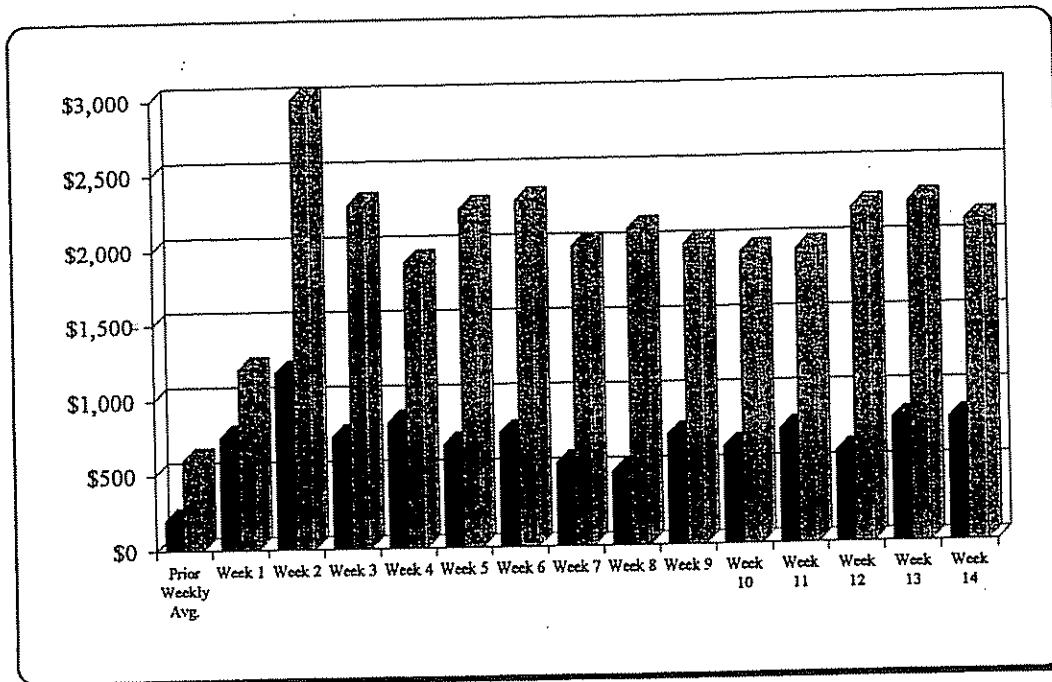
**VIRGINIA LOTTERY**  
**Example of Sales Increases using the ITR-7000**



	45 DAYS WITHOUT ITR	45 DAYS WITH ITR	INCREASE
Giant #180	\$200	\$600	200.00%
Spotlight Video	\$747	\$1,196	60.11%
Bowl America	\$835	\$1,909	128.62%
Sadler Truck Stop	\$551	\$2,000	262.98%
Woolworth #1721	\$487	\$2,108	332.85%
Kroger Supermarket #228	\$684	\$2,260	230.41%
Shoppers Supermarket #28	\$746	\$2,295	207.64%
Whites Truck Stop	\$758	\$2,311	204.88%
Dixie Pig Restaurant	\$1,171	\$3,024	158.24%
<b>Total sales for test period</b>	<b>\$6,179</b>	<b>\$17,703</b>	<b>186.50%</b>

This information was compiled by Scientific Games, Inc. resulting from an independent survey in March 1992  
Kroger Supermarket #228 data includes 25 days only

WASHINGTON LOTTERY  
Example of Sales Increases using the ITR-7000



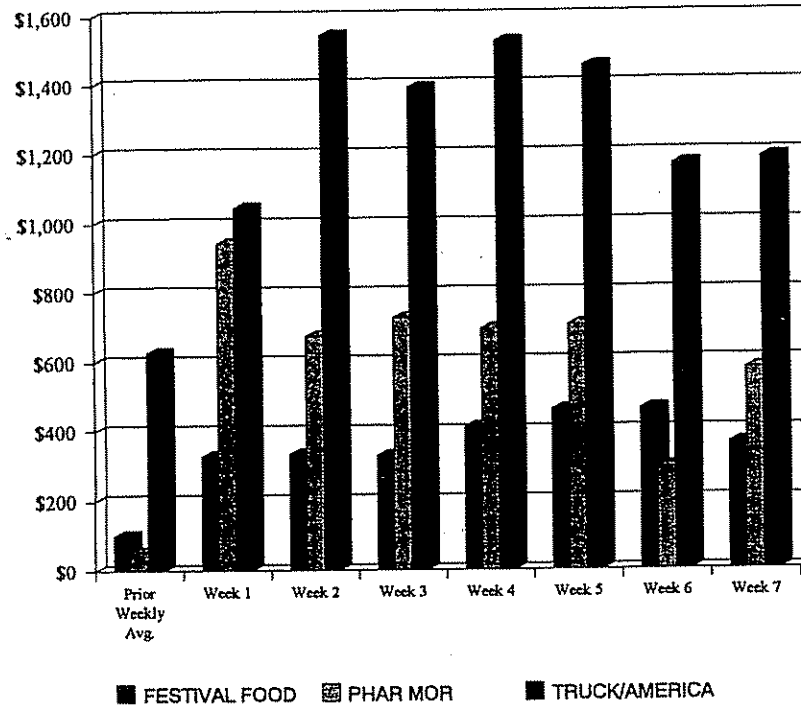
	ALBERTON'S #472	BAYVIEW MARKET
ITR Model Number	ITR-7000-4	ITR-7000-4
Prior Weekly Avg.	\$600	\$200
Week 1	\$1,196	\$747
Week 2	\$3,024	\$1,171
Week 3	\$2,295	\$746
Week 4	\$1,909	\$835
Week 5	\$2,260	\$684
Week 6	\$2,311	\$758
Week 7	\$2,000	\$551
Week 8	\$2,108	\$487
Week 9	\$2,005	\$729
Week 10	\$1,942	\$645
Week 11	\$1,961	\$754
Week 12	\$2,231	\$601
Week 13	\$2,263	\$817
Week 14	\$2,138	\$818
Total sales to date for test period:	\$29,643	\$10,343
Average weekly sales:	\$2,117	\$739
\$ Increase over average:	\$1,517	\$539
% Increase over average:	252.89%	269.39%

\* Week 1 was a partial week

Last printed on 3/24/1992

copyright 1992, Lottery Enterprises, Inc.

**PENNSYLVANIA LOTTERY**  
**Example of Sales Increases using the ITR-7000**



	FESTIVAL FOOD	PHAR MOR	TRUCK/AMERICA
ITR Model Number	ITR-7000-4	ITR-7000-4	ITR-7000-4
Prior Weekly Avg.	\$100	\$50	\$625
Week 1	\$326	\$942	\$1,044
Week 2	\$332	\$674	\$1,545
Week 3	\$327	\$726	\$1,390
Week 4	\$411	\$695	\$1,526
Week 5	\$460	\$706	\$1,452
Week 6	\$462	\$292	\$1,167
Week 7	\$360	\$577	\$1,184
Total sales for test period:	\$2,678	\$4,612	\$9,308
Average weekly sales:	\$383	\$659	\$1,330
\$ Increase over average:	\$283	\$609	\$705
% Increase over average:	282.57%	1217.71%	112.75%

## Virginia

### An Update on

# Virginia's Instant Ticket Vending Machines

Prepared by the Virginia Lottery

Virginia became the first state to begin a large-scale installation of instant ticket vending machines (ITVMs) last summer. In just six months, the program has proven profitable for retailers and popular with players.

When the first machine was installed in June, at a Giant grocery store in an affluent northern county, the Lottery had planned to concentrate only in the northern Virginia area for the first 12 months. But as the Lottery quickly worked a few start-up glitches out of the program, the Lottery sales department decided to move the program to three other parts of the state: south to Richmond, west to Harrisonburg and east to the Norfolk area.

"Consumer convenience, accessibility to multiple games, higher visibility and less labor intensive are factors that make ITVMs the right choice for higher, more profitable sales in many retail locations," says Ken Thorson, the Lottery's director.

More than 250 machines have been installed. They are currently being installed at a rate of 30 per week.

During this first year of the program, Virginia is concentrating on supermarkets, chain drug stores and bowling centers. In addition, Burger King

restaurants have made an application to install the vending machines in 16 of its franchised restaurants in the eastern part of the state.

The Lottery Enterprises Inc. machines installed at each location sell four instant games at a time. To access instant tickets through the vending machine, players first insert a \$1, \$5,

instant vending machines there's a better chance of finding the game they want to play in our store." Safeway grocery stores had been selling only one game through the checkout stands.

Retailers have averaged weekly sales of 1,000 tickets per machine, with some retailers selling as many as 5,500 tickets per week.



Player purchases a ticket through the Virginia Lottery's instant ticket vending machine.

\$10 or \$20 bill, according to the amount they wish to play. Next, they select the game or games they wish to purchase, press a button to release the ticket through an opening and rip off the ticket along the perforation.

"Players like having more than one game available," says Sam Chandler, who oversees lottery sales at a Safeway grocery store in Fairfax, Va. "Most people have a favorite game, and with the

vending machines until the demand has been satisfied. The Lottery may install as many as 2,000 instant ticket vending machines.

"The machine stays busy all of the time," says William McMillan, an assistant manager at an Arlington Rite Aid drugstore in Virginia. "We sell three times as many tickets than what we had been selling through the registers."

Chris Borglin, whose F.W. Woolworth Co.'s store received the first ITVM in the Richmond, Va. area, says the store sold 600 tickets on Saturday during the first week. Prior to that, it generally took a week to sell the same amount of tickets, Borglin says.

Virginia will install more than 100 vending machines a month and will seek new types of businesses to sell lottery tickets through the



*The Leader In Instant Ticket Dispensing Technology*

# **ITR™-7000 INSTANT TICKET RETAILER**



## A TROUBLE-FREE DISPENSER WITH SPLIT-SECOND SPEED.

**T**he consumer-activated INSTANT TICKET RETAILER (model ITR™-7000) opens up uncharted marketing opportunities for retailing instant lottery tickets. The ITR™-7000 is designed to streamline the marketing of instant lottery tickets by opening up new markets which heretofore have not been available to lotteries. Specifically, these markets can be identified as those where sales now exist but at a level far below potential (typically food chain stores, liquor stores, etc) and locations where potential exists but instant tickets are not being offered for sale (private clubs, bars, malls, etc).

The ITR™-7000 is simple to operate. The customer inserts a dollar bill, in any denomination of one, five, ten or twenty dollars and makes a selection from one to eight separate games. It's simple. It's convenient. And it's secure. Additionally, each ITR™-7000 dispensing unit stores up to 3,000 tickets for a maximum of 24,000 tickets per machine. This coupled with the fact that it keeps track of

all the accounting and inventory of each game and tied in with the LEI FILE SERVER™ will alert the lottery in ample time to replenish ticket stock when it becomes low and will make distribution of tickets routine.

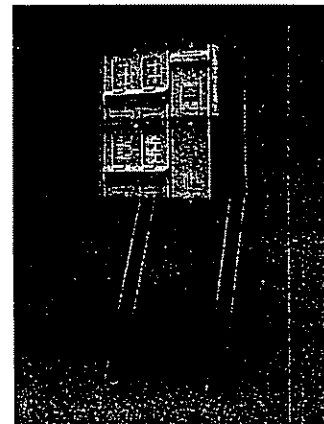
The ITR™-7000 has an optional attention-getting LED scrolling sign to attract impulse buyers. The sign is loaded from the LEI FILE SERVER™ at Lottery headquarters or other remote locations to promote special games or winning jackpots.

The ITR™-7000 is available in four convenient models. All include standard bill acceptors and/or optional coin acceptors (see -C). the -2 houses two dispensers, the -4 houses four dispensers, the -6 houses six dispensers and the -8 houses eight dispensers. All models are available as counter tops, wall mounts or stand-alone terminals. The stand-alone models offer two options: Twin-L legs or security storage cabinet.

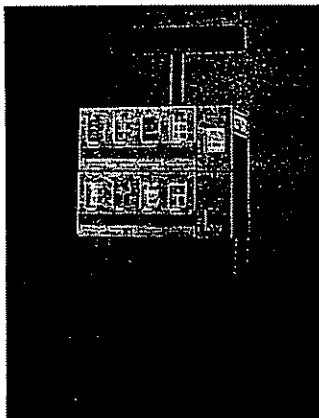
Quite simply, LEI's ITR™-7000 will revolutionize the way you'll market Instant Lottery Tickets.



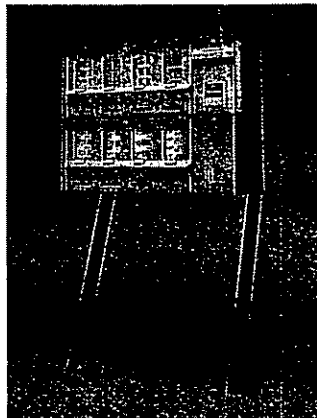
ITR™-7000-2-C  
Shown with optional coin acceptor



ITR™-7000-4



ITR™-7000-8-S  
Shown with optional LED display

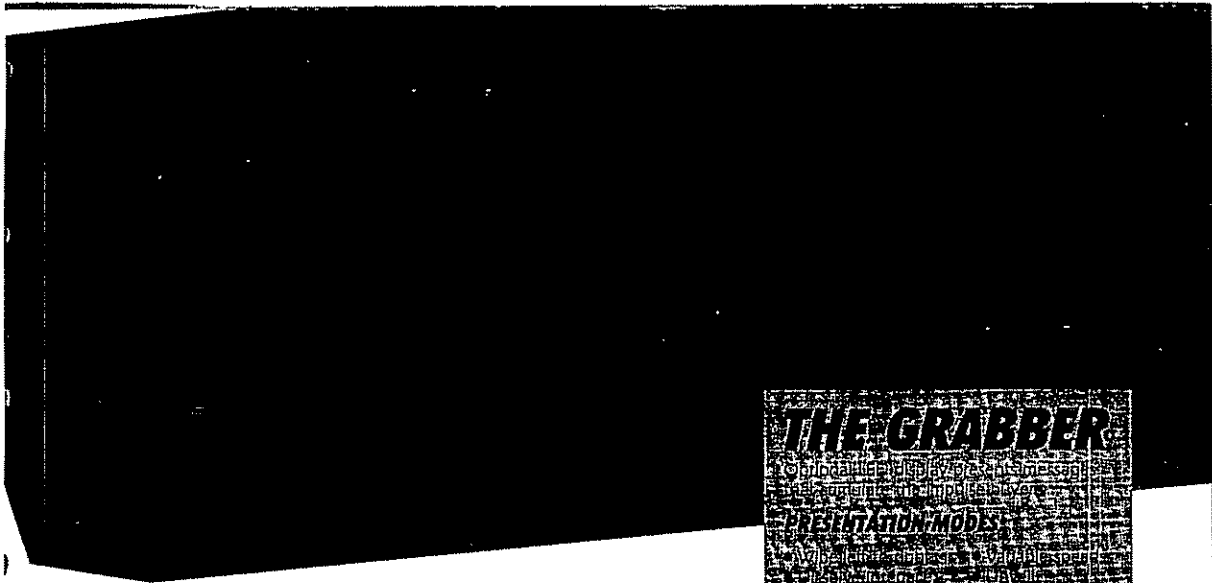


ITR™-7000-8



ITR™-7000-6





## ITR™-7000 ADVANTAGES

### TO THE LOTTERY

- Increase Sales
- Security
- Multi-game Sales (up to 8 games/unit)
- Daily Sales Information

BY: Agent  
Classification  
Geographical

- LED Sign Downloadable
- Total Accounting And Inventory Control
- Increased Efficiency And Cost Effective Marketing

FOR: Promotion  
Incentive Programs  
Advertising

- Messages On Terminal Downloadable From Central Computer
- FOR: Individual Agents or all the Agents
- Complete Close-out Of Game
- Total Control Of System (via dial-up communication)
- Real Time Clock (allows automatic communications)
- Information Contained In ITR™
- Battery Backup (in the event of power loss)
- Daily Inventory And Sales Reports (insure ticket availability)
- No Out Of Stock Situations
- Opportunity For New Sales Outlets

### TO THE AGENT

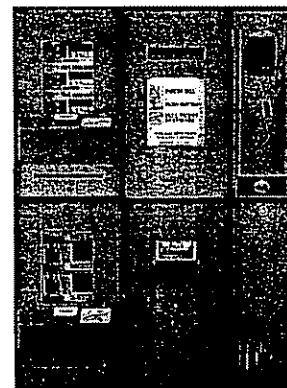
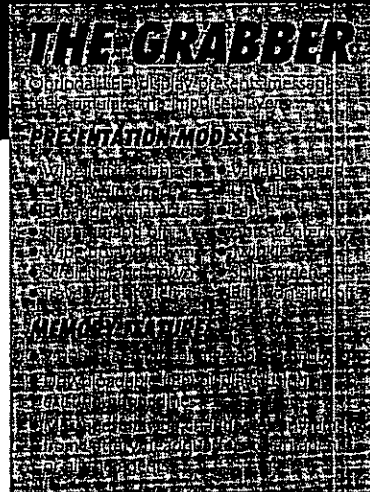
- Increase Sales
- Security
- Total Accounting And Inventory Control
- Reports

Current day sales  
Daily sales for two days  
Weekly sales for two weeks  
Invoices

- Automatic Reordering Of Tickets
- Point Of Sale Advertising
- Hard Copy Sales Reports
- RS232 Port For Central Control
- Ability To Sell Tickets Anywhere
- Ergonomically Designed Unit
- Automatic Agent ID Imprint (optional)
- Easy To Operate
- Consumer Oriented
- Holds 3,000 Instant Tickets For Each Game
- Small Footprint
- Does Not Require A Sales Clerk
- Contains Its Own Cash Compartment
- Double Security Locks
- Heavy Steel Construction
- Multi-game Sales (up to 8 games unit)

### TO THE CONSUMER

- Availability
- Convenience
- Ability To Purchase A Ticket Anywhere
- Ease Of Purchase
- Choice Of Instant Lottery Game



### ITR™-7000 VERSATILITY

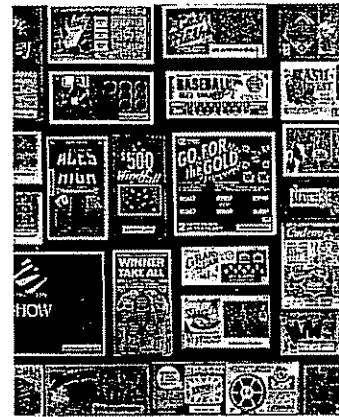
Standard bill acceptor with installation of optional coin acceptor greatly enhances ticket buyer convenience by offering a multitude of currency choices.

## SPECIFICATIONS

	Height	*Width	Depth
ITR™-7000-2	27.25"	15.25"	18.0"
ITR™-7000-4	27.25"	21.25"	18.0"
ITR™-7000-6	27.25"	27.25"	18.0"
ITR™-7000-8	27.25"	33.25"	18.0"

115 or 240V AC 47 or 60 Hz 2 Amp

\*Optional coin acceptor [-C] adds 4.0" to overall width.



### ITR™-7000 VERSATILITY

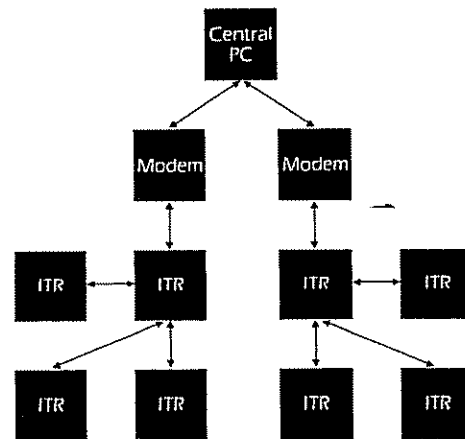
Accepts any size tickets with widths from 2" to 4" and lengths from 1 1/4" to 6".

## LEI FILE SERVER™

As depicted in the diagram, every ITR™-7000 is capable of interrogating over thirty other ITR™-7000's via its smart modem. This feature permits the central PC (at Lottery headquarters or other remote locations) to collect all of the sales and inventory information from any one city or local with a single phone call, thus reducing the necessity of tying up a large number of 800 or WATS lines. Considering connect time, it is estimated that a PC with dual modems can interrogate over 21,000 ITRs™ in a seven hour time span. All communications are done on a dial-up basis eliminating costly dedicated phone lines.

Timely reports are broken down into agent categories, i.e. convenience stores, bars, nightclubs, etc. and also by geographic location. This permits the lottery to pinpoint advertising, agent training or special promotions.

In addition, special messages may be automatically downloaded to the optional LED sign during the interrogation of the ITR™. Messages may be sent to specific agents or to the entire state.



### Lottery Enterprises, Inc.

Corporate Headquarters  
7372 Convey Court  
San Diego, California 92111  
Tel. (619) 569-5266 Fax (619) 569-9157  
Toll Free (800) 879-ITR7  
(800) 879-4877

East Coast Office  
74 Branch St. #17  
Scituate, Massachusetts 02066  
Tel. (617) 545-4829 Fax (617) 545-4477



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Exhibit E

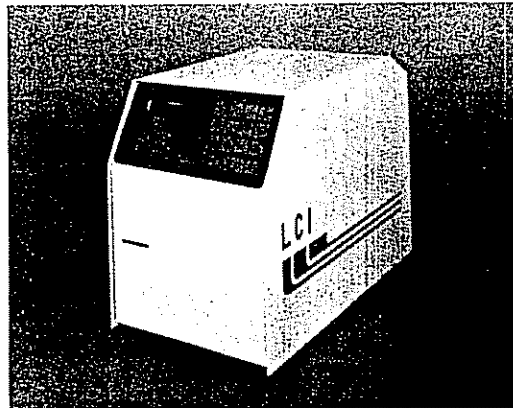
## **I T R 5000™**

### **INSTANT TICKET RETAILER**

ITR COMBINES ERGONOMIC DESIGN AND ADVANCED TECHNOLOGY FOR INCREASING SALES AND REDUCING COSTS ASSOCIATED WITH DISPENSING INSTANT LOTTERY TICKETS.

#### **FEATURES:**

- HOLDS UP TO 1500 INSTANT TICKETS.
- ACCOUNTING AND INVENTORY CONTROL FOR LOTTERY AND AGENT.
- ENHANCED SECURITY.
- LCD (LIQUID CRYSTAL DISPLAY) PROGRAMMABLE FOR ADVERTISING.
- DIAL-UP COMMUNICATIONS TO CENTRAL COMPUTER.
- AGENT AND CONSUMER ORIENTED.
- INSTANT SALES AND INVENTORY REPORTS.
- INCREASED SALES OPPORTUNITIES.
- AUTOMATIC AGENT ID IMPRINT.
- EASY FOR AGENT TO OPERATE.
- DISPENSES ANY SIZE TICKET UP TO 2" × 4".



LOTTERY CONCEPTS INTERNATIONAL, INC.

## **I T R 5000™**

### **INSTANT TICKET RETAILER**

The ITR terminal has a small foot print to fit in tight selling areas such as encountered in convenience stores yet is able to promote the instant ticket product, especially with the LCD option.

The ITR terminal has a 16 key keypad and an LCD display for the agent. The agent need only key in the number of tickets required and depress "enter" to dispense the tickets to the customer. The keypad uses membrane technology for trouble free operation, and is laid out in two sections. The first section is numbered 0-10, and "CE" (clear entry), the remaining four keys are labled "SIGN ON", "REPORT", "CASH", AND "ENTER". The logical, ergonomic design of the keypad insures all functions available are initiated with simple, easy to follow key strokes.

The agent LCD is used to display the dollar amount to be collected. All report functions can be written on this 16 character display.

An adjustable ticket bin is provided to accomodate tickets from 2.0" to 4.0" wide, and fan folded in sections of five tickets each, to a maximum of 1500 tickets. An alarm will sound when out of stock or a power low (brown out) condition. The change of ticket size can be accommodated by the terminal with only simple adjustments which can be carried out by an agent or lottery representative.

A real time clock is supplied for time and date tracking (24-hour). The clock can be used for many communication functions such as auto dial out to host computer for sales reporting, allow communications only at specified times, time stamp certain transactions, and dial-up for after hours data collection.

No marks, holes, or notches of any kind are required on the ticket stock.

A compact printer is available to give a hard copy of the sales reports. This option is extremely important where agents need to reconcile sales after each shift, or verify transactions of a previous date.

### **SPECIFICATIONS**

Height: 12.0" Width: 9.0" Length: 15.0"

Weight: 16 lbs.

115 VAC 60 Hz 50 Watts .50 Amps

Capacity: 1500 tickets

Ticket Sizes: 1.25" to 2.00" long. 2.75" to 4.00" wide.

### **OPTIONS**

1200-baud modem.

20 Colume thermal printer.

80 character backlit programmable LCD customer display.

Marketed exclusively by:  
Lottery Concepts International  
74 Branch Street Suite 17  
Scituate, MA 02066  
(617) 545-4829

West Coast Office:  
7515 Charmant Drive Suite 1407  
San Diego, CA 92122  
(619) 546-7601

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Exhibit F

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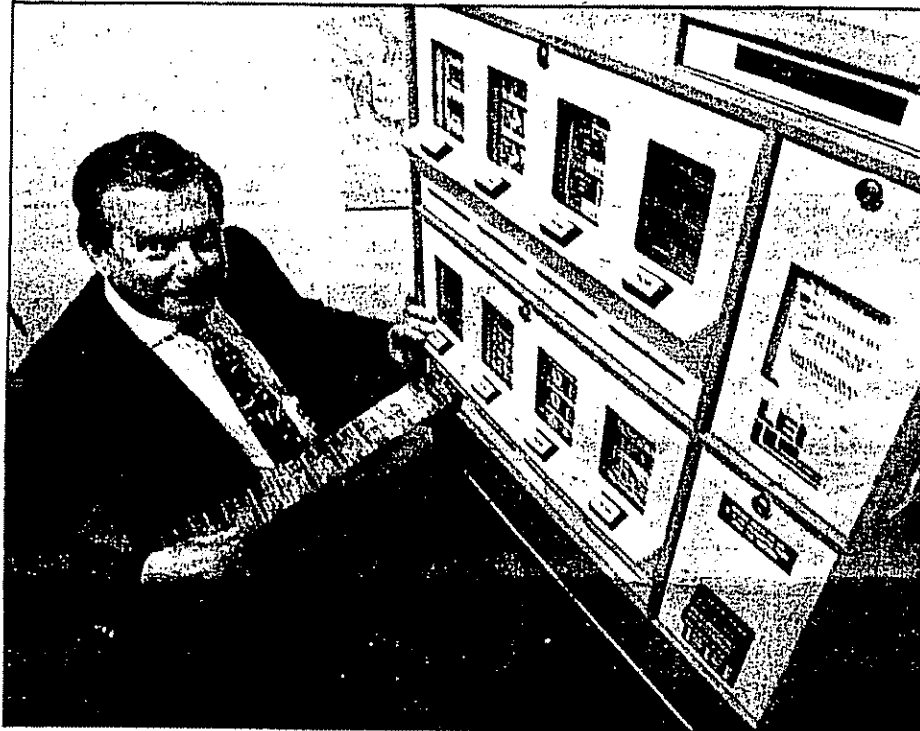
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Union-Tribune / JAMES SKOVMAND

**Local jackpot:** Robert Burr, president of Lottery Enterprises Inc., demonstrates the machine that dispenses scratch-off lottery tickets.

## State awards \$15 million contract for lottery ticket vending devices

By CRAIG D. ROSE, Staff Writer

A small San Diego company has won a \$15 million state contract to supply thousands of scratch-off lottery ticket vending machines, with the first machines expected in local Vons and Ralphs grocery stores by next week.

Lottery Enterprises Inc., a 2-year-old company in Kearny Mesa, said the initial order calls for up to 2,000 of its vending machines to be installed around the state by November. Options included in the five-year contract could lead to the installation of 4,500 to 6,500 more vending units, said Robert Burr, the company's chief executive officer.

The contract means the company will hire more than 100 people at its local facility and statewide to service the machines, Burr said. Lottery Enterprises currently employs 25 persons in Kearny Mesa, where the machines are manufactured, and 20 in Virginia, where it has installed 1,300 machines.

The California order also is likely to boost em-

ployment at companies that supply Lottery Enterprises with materials and components. Many of those companies are local, minority-owned businesses, Burr added.

State lottery authorities estimate that 400 new jobs will result from the contract.

Lottery Enterprises earlier won contracts to install scratch-off lottery-ticket machines in Delaware, Vermont and Colorado. The Canadian province of Ontario also is currently evaluating company's units, as are authorities in Spain, Iceland and England, Burr said.

Lottery Enterprises says its machines are more convenient than over-the-counter sales and have increased ticket sales dramatically in other states.

"We've seen that every place we've put them in, the tickets are an impulse buy, and our machines are designed with windows so the tickets

See Lottery on Page C-2

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10-14-92  
FMOK

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Anthony  
10-14-92

Applicant : Robert L. Burr  
Serial No. : 07/912,005  
Filed : July 10, 1992  
For : TICKET DISPENSER MACHINE AND METHOD  
Group Art Unit : 3101  
Examiner : D. Bollinger

530 Fifth Avenue  
New York, New York 10036

I hereby certify that this correspondence  
is being deposited with the United States  
Postal Service as first class mail in an  
envelope addressed to:  
Hon. Commissioner of Patents and Trademarks  
Washington, D.C. 20231, on October 1, 1992

Gregor N. Neff, Reg. No. 20,596  
Name of Applicant, Assignee or Registered  
Representative  
Gregor Neff  
Signature  
October 1, 1992  
Date of Signature

AMENDMENT

Hon. Commissioner of Patents and Trademarks  
Washington, D.C. 20231

Sir:

In response to the Official Action mailed September 14,  
1992, please enter the following amendment of the above-  
identified patent application:

IN THE CLAIMS:

Rewrite claims 1 and 16 as follows:

PATENT  
3390-2030

1. (Twice Amended) A ticket dispensing machine,  
comprising, in combination, a housing, at least one window in  
said housing through which tickets inside said housing can be  
seen but not touched by a person outside said housing, a  
dispensing outlet in said housing, electrically powered means for  
moving a continuous strip of tickets past said window, and for  
dispensing through said outlet a pre-determined number of said  
tickets to an operator of said machine[, and protective means for  
detering the operator of the machine from withdrawing from said  
machine more than said pre-determined number of tickets].

9 16. (Twice Amended) A ticket vending method, said method  
comprising the steps of:

(a) utilizing electrically powered drive means for  
moving a strip of mutually-attached tickets past a viewing window  
in a housing in a manner such that the tickets can be seen from  
outside said housing, and

(b) issuing from said housing a pre-determined number  
of tickets from said array which are ordered by an operator[, and  
operating means for detering said operator from withdrawing more  
than said number of tickets].

Claim 10, line 2, change "protective" to

--dispensing--;

NE? Claim 1, line 1, change "26" to --29--.

Claim 32, line 5, change "say" to --said--.

Claim 33, line 1, change "26" to --29--.

GNN9:2030.SPA

-2-



PATENT  
3390-2030

REMARKS

The undersigned attorney would like to take this opportunity to thank the Examiner for the courtesies extended to him and Mr. Robert L. Burr, the inventor, during the interview which took place on August 26, 1992.

During the interview, the facts and Exhibits in the accompanying Declaration Under Rule 132 were explained to the Examiner to demonstrate the commercial success which has been achieved by the invention. In particular, the test results set forth in Exhibit D were offered to show the impressive ticket sales increases achieved by the machine using the invention.

As it was explained during the interview, the commercial success of the invention, which is far in excess of what might be expected, demonstrates the unobviousness of the invention. The Groves and Knee references simply do not show or suggest the extraordinary increase of ticket sales produced by driving an array of tickets past a window in the dispensing device.

As to the assertion of indefiniteness of claims 1, 2, 4-6, 31 and 33, it is believed that the claims are sufficiently definite. Whether there is a single mechanism for moving the strip and dispensing the tickets, or separate means for each function is not believed to be important to the patentability of the invention because the movement of the ticket array past the window is at the heart of the commercial success, and the means

PATENT  
3390-2030

disclosed is properly recited as means for performing the moving and dispensing.

Claims 1 and 16 have been sharpened by elimination of the protective means (Claim 1) and the protective step (Claim 16) for preventing unauthorized withdrawal of tickets because that feature is off the main point of the invention. It is believed that the Examiner concurred with this proposal during the interview.

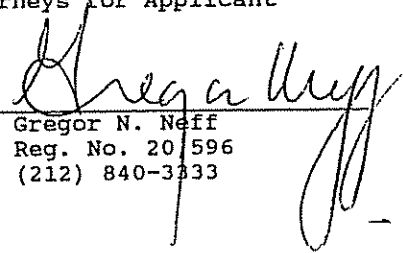
In accordance with the foregoing, and the comments in the Examiner Interview Summary Record, it is believed that the patent application is in condition for allowance.

Accordingly, it is respectfully requested that the application be allowed and passed to issue.

Respectfully submitted,

CURTIS, MORRIS & SAFFORD, P.C.  
Attorneys for Applicant

By

  
Gregor N. Neff  
Reg. No. 20,596  
(212) 840-3333



UNITED STATES DEPARTMENT OF COMMERCE  
Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231

SERIAL NUMBER	FILING DATE	FIRST NAMED APPLICANT	ATTORNEY DOCKET NO.
07/912,005	07/10/92	BURR	R 3390-2030
			EXAMINER
GREGOR N. NEFF C/O CURTIS, MORRIS & SAFFORD 530 5TH AVE. NEW YORK, NY 10036			BOLLINGER, D
			ART UNIT PAPER NUMBER
			3101 18
			DATE MAILED: 12/16/92

### NOTICE OF ALLOWABILITY

#### PART I.

- ☒ This communication is responsive to the communications filed 5 October 1992.
- ☒ All the claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice Of Allowance And Issue Fee Due or other appropriate communication will be sent in due course.
- ☒ The allowed claims are 1, 2, 4-6, 10-12, 16, 18, 21, 22, 29-33, 38-40, 43-45 & 47.
- ☐ The drawings filed on \_\_\_\_\_ are acceptable.
- ☐ Acknowledgment is made of the claim for priority under 35 U.S.C. 119. The certified copy has ☐ been received. ☐ not been received. ☐ been filed in parent application Serial No. \_\_\_\_\_, filed on \_\_\_\_\_.
- ☒ Note the attached Examiner's Amendment.
- ☐ Note the attached Examiner Interview Summary Record, PTOL-413.
- ☐ Note the attached Examiner's Statement of Reasons for Allowance.
- ☐ Note the attached NOTICE OF REFERENCES CITED, PTO-892.
- ☐ Note the attached INFORMATION DISCLOSURE CITATION, PTO-1449.

#### PART II.

A SHORTENED STATUTORY PERIOD FOR RESPONSE to comply with the requirements noted below is set to EXPIRE THREE MONTHS FROM THE "DATE MAILED" indicated on this form. Failure to timely comply will result in the ABANDONMENT of this application. Extensions of time may be obtained under the provisions of 37 CFR 1.135(a).

- ☐ Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL APPLICATION, PTO-152, which discloses that the oath or declaration is deficient. A SUBSTITUTE OATH OR DECLARATION IS REQUIRED.
- ☒ APPLICANT MUST MAKE THE DRAWING CHANGES INDICATED BELOW IN THE MANNER SET FORTH ON THE REVERSE SIDE OF THIS PAPER.
  - ☒ Drawing Informalities are indicated on the NOTICE RE PATENT DRAWINGS, PTO-946, attached hereto or to Paper No. 8. CORRECTION IS REQUIRED.
  - ☐ The proposed drawing correction filed on \_\_\_\_\_ has been approved by the examiner. CORRECTION IS REQUIRED.
  - ☐ Approved drawing corrections are described by the examiner in the attached EXAMINER'S AMENDMENT. CORRECTION IS REQUIRED.
  - ☒ Formal drawings are now REQUIRED.

Any response to this letter should include in the upper right hand corner, the following information from the NOTICE OF ALLOWANCE AND ISSUE FEE DUE: ISSUE BATCH NUMBER, DATE OF THE NOTICE OF ALLOWANCE, AND SERIAL NUMBER.

#### Attachments:

- |  |  |
|--|--|
| <input checked="" type="checkbox"/> Examiner's Amendment             | <input type="checkbox"/> Notice of Informal Application, PTO-152 |
| <input type="checkbox"/> Examiner Interview Summary Record, PTOL-413 | <input type="checkbox"/> Notice re Patent Drawings, PTO-946      |
| <input type="checkbox"/> Reasons for Allowance                       | <input type="checkbox"/> Listing of Bonded Draftsmen             |
| <input type="checkbox"/> Notice of References Cited, PTO-892         | <input type="checkbox"/> Other                                   |
| <input type="checkbox"/> Information Disclosure Citation, PTO-1449   |  |

Serial No. 912005

-2-

Art Unit 3101

Applicant's directions to amend claim 1 line 1 to change "26" to --29--, on page 2 of the amendment filed 5 October 1992, are defective as "26" does not appear in line 1 of claim 1, therefore; this portion of the above mentioned amendment has not been entered.

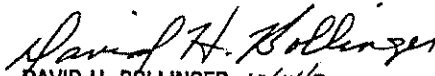
An Examiner's Amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 C.F.R. § 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the Issue Fee.

In the claims:

claim 31 line 1 "26" has been changed to --29--.

This amendment has been made to correct the dependency of claim 31 so as not to depend from a canceled claim. Further, it was agreed to make such a correction in the interview of 26 August 1992.

Any inquiry concerning this communication should be directed to David Bollinger at telephone number (703) 308-1113.

  
DAVID H. BOLLINGER 12/14/92  
PRIMARY EXAMINER  
GROUP 310

dhb  
December 12, 1992


**UNITED STATES DEPARTMENT OF COMMERCE  
Patent and Trademark Office**

Address: Box ISSUE FEE  
COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231

GREGOR N. NEFF  
C/O CURTIS, MORRIS & SAFFORD  
530 5TH AVE.  
NEW YORK, NY 10036

**NOTICE OF ALLOWANCE  
AND ISSUE FEE DUE**

- ☐ Note attached communication from the Examiner  
☐ This notice is issued in view of applicant's communication filed \_\_\_\_\_

SERIES CODE/SERIAL NO.	FILING DATE	TOTAL CLAIMS	EXAMINER AND GROUP ART UNIT	DATE MADE
07/912,005	07/10/92	024	BULLINGER- D	3101
First Named Applicant	BURR,	ROBERT		

TITLE OF INVENTION **TICKET DISPENSER MACHINE AND METHOD**

ATTY'S DOCKET NO.	CLASS-SUBCLASS	BATCH NO.	APPLN. TYPE	SMALL ENTITY	FEE DUE	DATE DUE
3 3390-2030	221-001.000	198	UTILITY	YES	\$585.00	6/93

**THE FEE DUE IS THE AMOUNT IN EFFECT AT THIS TIME. IF THE AMOUNT OF THE ISSUE FEE INCREASES PRIOR TO PAYMENT, APPLICANT WILL BE NOTIFIED OF THE BALANCE OF ISSUE FEE DUE.**

**THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT.**

**PROSECUTION ON THE MERITS IS CLOSED.**

**THE ISSUE FEE MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED.**

**HOW TO RESPOND TO THIS NOTICE:**

- I. Review the SMALL ENTITY Status shown above.  
If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:
  - A. If the status is changed, pay twice the amount of the FEE DUE shown above and notify the patent and Trademark Office of the change in status, or
  - B. If the Status is the same, pay the FEE DUE shown above.
- II. Part B of this notice should be completed and returned to the Patent and Trademark Office (PTO) with your ISSUE FEE. Even if the ISSUE FEE has already been paid by charge to deposit account, Part B should be completed and returned. If you are charging the ISSUE FEE to your deposit account, Part C of this notice should also be completed and returned.
- III. All communications regarding this application must give series code (or filing date) and serial number. Please direct all communications prior to issuance to Box ISSUE FEE unless advised to contrary.

If the SMALL ENTITY is shown as NO:

- A. Pay FEE DUE shown above, or
- B. File verified statement of Small Entity Status before, or with, pay of 1/2 the FEE DUE shown above.

**IMPORTANT REMINDER: Patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.**

## PART B - ISSUE FEE TRANSMITT

**MAILING INSTRUCTIONS:** This form should be used for transmitting the ISSUE FEE. Blocks 2 through 6 should be completed where appropriate. All further correspondence including the Issue Fee Receipt, the Patent, advances orders and notification of maintenance fees will be mailed to addressee entered in Block 1 unless you direct otherwise, by (a) specifying a new correspondence address in Block below; or (b) providing the PTO with a separate FEE ADDRESS for maintenance fee notifications and the payment of Issue Fee or thereafter. See reverse for Certificate of Mailing.

1. CORRESPONDENCE ADDRESS		2. INVENTOR(S) ADDRESS CHANGE (Complete only if there is a change)	
GREGOR N. NEFF CURTIS MORRIS & SAFFORD 530 5TH AVE. NEW YORK, NY 10036		INVENTOR'S NAME Street Address City, State and ZIP Code CO-INVENTOR'S NAME Street Address City, State and ZIP Code <input type="checkbox"/> Check if additional changes are on reverse side	

SERIES CODE/SERIAL NO.	FILING DATE	TOTAL CLAIMS	EXAMINER AND GROUP ART UNIT	DATE MAILED
07/912,005	07/16/93	024	REG. CLERK	
First Named Applicant: BUFE				

TITLE OF INVENTION: TICKET DISPENSER MACHINE AND METHOD  
 Ed. Gregor N. Neff

ATTY'S DOCKET NO.	CLASS-SUBCLASS	BATCH NO.	APPL. TYPE	SMALL ENTITY	FEE DUE	DATE DUE
3390-2030	221-001.000	193	UTILITY	YES	30.00CH	02/24/93

3. Correspondence address change (Complete only if there is a change)	4. For printing on the patent front page, list the names of not more than 3 registered patent attorneys or agents OR alternatively, the name of a firm having as a member a registered attorney or agent. If no name is listed, no name will be printed.
	1. Gregor N. Neff, Esq. Reg. No. 20,596 2. Curtis, Morris & Safford Reg. No. 12,761

AP14526 02/24/93 07912005	02/24/93 140 561	30.00CH
040 TD 02/24/93 07912005	1.242	585.00CH

5. ASSIGNMENT DATA TO BE PRINTED ON THE PATENT (print or type)		6a. The following fees are enclosed:	
(1) NAME OF ASSIGNEE: Donald Sutherland, Trustee of the Ralph I. Evans Trust Box 2348, Rancho Santa Fe, California 92067 (2) ADDRESS: (CITY & STATE OR COUNTY) (3) STATE OF INCORPORATION, IF ASSIGNEE IS A CORPORATION		<input type="checkbox"/> Issue Fee <input type="checkbox"/> Advanced Order - # of Copies (Minimum of 10) 6b. The following fees should be charged for: DEPOSIT ACCOUNT NUMBER: 03-3925 (ENCLOSED PART C) <input type="checkbox"/> Issue Fee <input type="checkbox"/> Advanced Order - # of Copies (Minimum of 10) <input type="checkbox"/> Any Delinquencies in Enclosed Fees	
<input type="checkbox"/> This application is NOT assigned. <input checked="" type="checkbox"/> Assignment is being previously submitted to the Patent and Trademark Office. <input type="checkbox"/> Assignment is being submitted under separate cover. Assignments should be directed to Box ASSIGNMENTS. PLEASE NOTE: Unless an assignee is identified in Block 5, no assignee data will appear on the patent. Inclusion of assignee data is only appropriate when an assignment has been previously submitted to the PTO or is being submitted under separate cover. Completion of this form is NOT a substitute for filing an assignment.		The COMMISSIONER OF PATENTS AND TRADEMARKS is requested to supply the Issue Fee to the application identified above. (Signature of party in interest or record) <i>Gregor Neff</i> (Date) 2/12/93 NOTE: The Issue Fee will not be accepted from anyone other than the applicant, a registered attorney or agent, or the assignee or other party in interest as shown by the records of the Patent and Trademark Office.	

TRANSMIT THIS FORM WITH FEE-CERTIFICATE OF MAILING ON REVERSE

**Certificate of Mailing**

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to:

Box ISSUE FEE  
Commissioner of Patents and Trademarks  
Washington, D.C. 20231

on February 12, 1993

(Date)

(Signature)

Gregor N. Neff, Esq.

(Typed or Printed Name)

February 12, 1993

(Date)

Note: If this certificate of mailing is used, it can only be used to transmit the Issue Fee. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing.

This form is estimated to take 20 minutes to Complete. Time will vary depending upon the needs of the individual applicant. Any comments on the amount of time you require to complete this form should be sent to the Office of Management and Organization, Patent and Trademark Office, Washington, D.C. 20231 and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, D.C. 20503.



55-215 #19 GP311



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Robert L. Burr, et al.  
Serial No. : 07/912,005  
Filed : July 10, 1992  
For : TICKET DISPENSER MACHINE AND METHOD  
Art Unit : 3101 ✓  
Examiner : D. Bollinger  
Batch No. : I98

RECEIVED  
APR - 7 1993  
GROUP 310

530 Fifth Avenue  
New York, New York 10036

PETITION UNDER 37 C.F.R. §1.136(a) and 1.17(a)

Honorable Commissioner of Patents and Trademarks  
Washington, D.C. 20231

Sir:

Pursuant to §1.136(a) applicants hereby request a one month extension of the period for filing formal drawings in response to the December 16, 1992 Notice of Allowability, Part II, i.e., up to and including April 16, 1993.

Enclosed herewith is a check for \$55.00 in payment of the fee set forth in §1.17(a) for a small entity for a one month extension under §1.136(a), 37 C.F.R.

The Commissioner is hereby authorized to charge any deficiencies or credit any overpayment in the petition fee to Deposit Account No. 03-3925.

070 AA 04/05/93 07912/005

1 215 55.00 CK



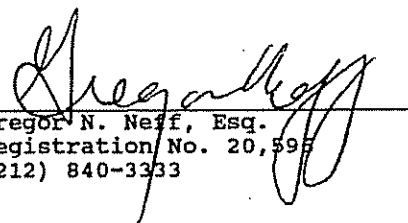
PATENT  
3390-2030

A duplicate of this petition is enclosed.

Respectfully submitted,

CURTIS, MORRIS & SAFFORD, P.C.

By

  
Gregor N. Neff, Esq.  
Registration No. 20,595  
(212) 840-3333

Enclosures

- Transmittal letter
- Formal Drawings (6 sheets)
- Check (\$55.00)

c:\wp51\LEI\2030.Pet



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Robert L. Burr, et al.  
Serial No. : 07/912,005  
Filed : July 10, 1992  
For : TICKET DISPENSER MACHINE AND METHOD  
Art Unit : 3101  
Examiner : D. Bollinger  
Batch No. : I98

RECEIVED  
APR - 7 1993  
GROUP 310

530 Fifth Avenue  
New York, New York 10036

PETITION UNDER 37 C.F.R. §1.136(a) and 1.17(a)

Honorable Commissioner of Patents and Trademarks  
Washington, D.C. 20231

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Enclosed herewith is a check for \$55.00 in payment of the fee set forth in §1.17(a) for a small entity for a one month extension under §1.136(a), 37 C.F.R.

The Commissioner is hereby authorized to charge any deficiencies or credit any overpayment in the petition fee to Deposit Account No. 03-3925.

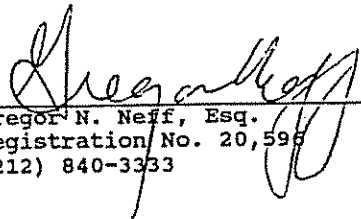
PATENT  
3390-2030

A duplicate of this petition is enclosed.

Respectfully submitted,

CURTIS, MORRIS & SAFFORD, P.C.

By

  
Gregor N. Neff, Esq.  
Registration No. 20,595  
(212) 840-3333

Enclosures

- Transmittal letter
- Formal Drawings (6 sheets)
- Check (\$55.00)

c:\wp51\LE1\2030.Pet



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Robert L. Burr, et al.  
Serial No. : 07/912,005  
Filed : July 10, 1992  
For : TICKET DISPENSER MACHINE AND METHOD  
Art Unit : 3101  
Examiner : D. Bollinger  
Batch No. : 198

530 Fifth Avenue  
New York, New York 10036

LETTER TRANSMITTING FORMAL DRAWINGS

Honorable Commissioner of Patents and Trademarks  
Washington, D.C. 20231

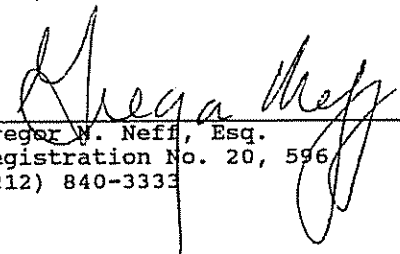
Attention: Official Draftsman

Sir:

Pursuant to Part II of the December 16, 1992 Notice of Allowability, with the term for reply having been extended one month, enclosed are six (6) sheets of formal drawings to be made of record in the above-identified patent application.

Respectfully submitted,  
CURTIS, MORRIS & SAFFORD, P.C.

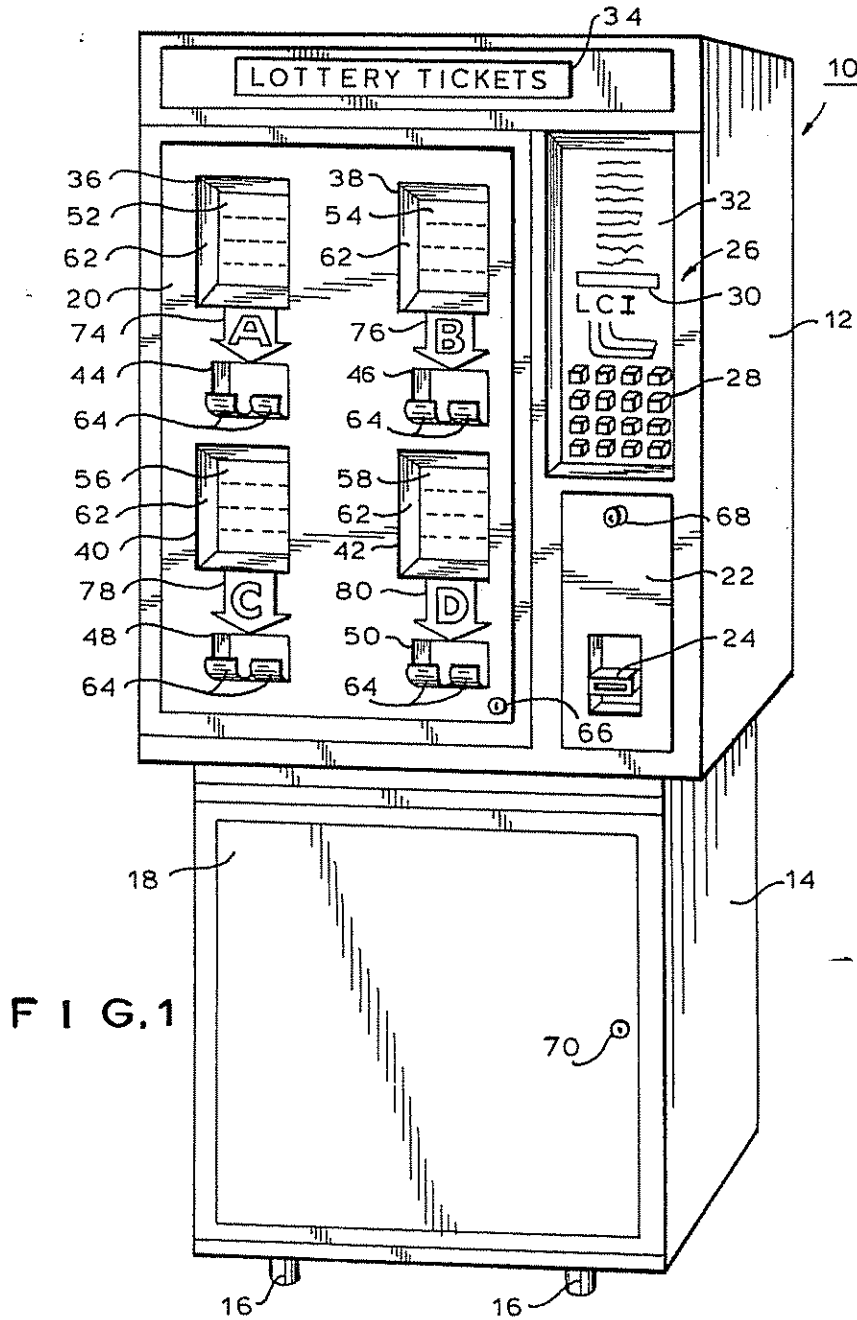
By

  
Gregor W. Neff, Esq.  
Registration No. 20, 596  
(212) 840-3333

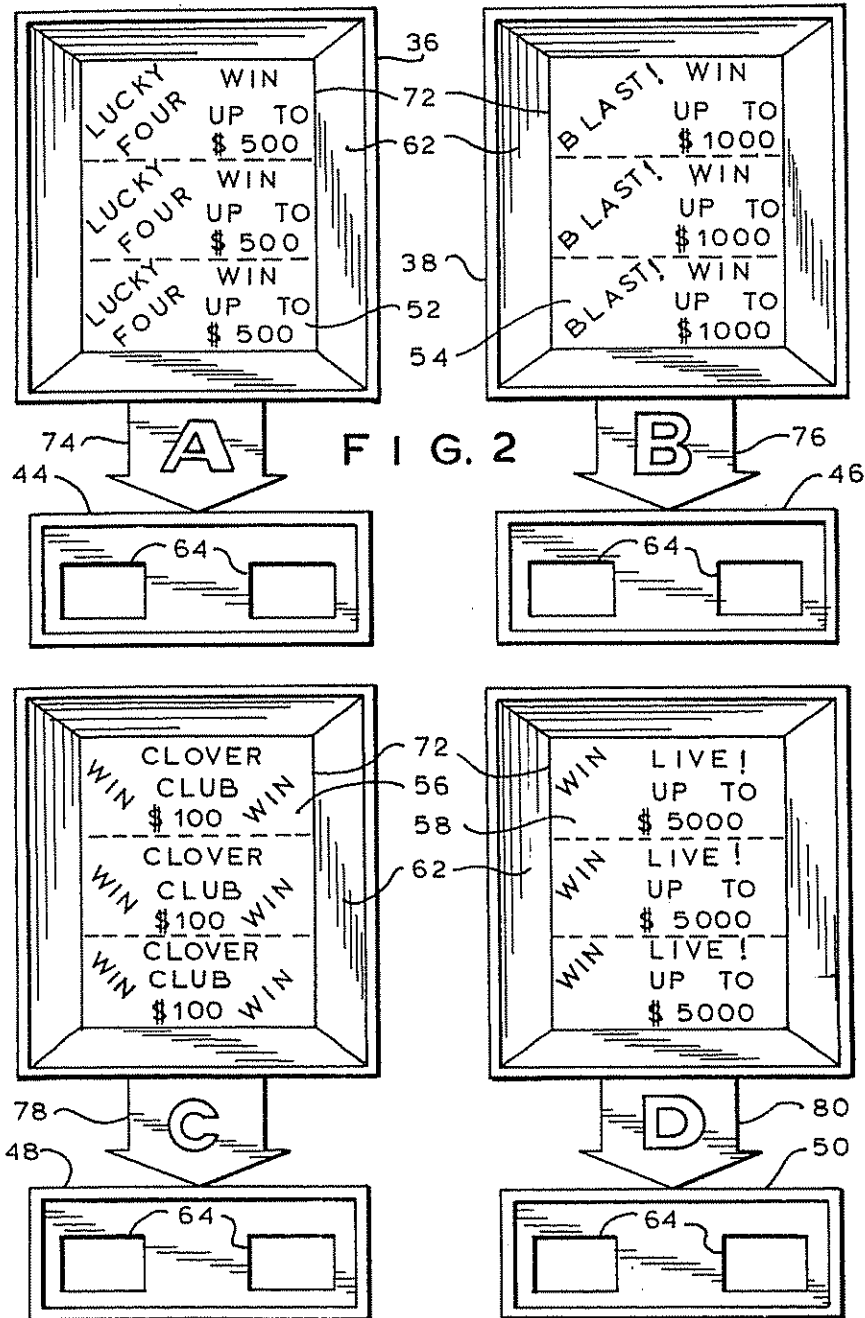
Enclosures  
- Drawings (6 sheets)

9/12.005

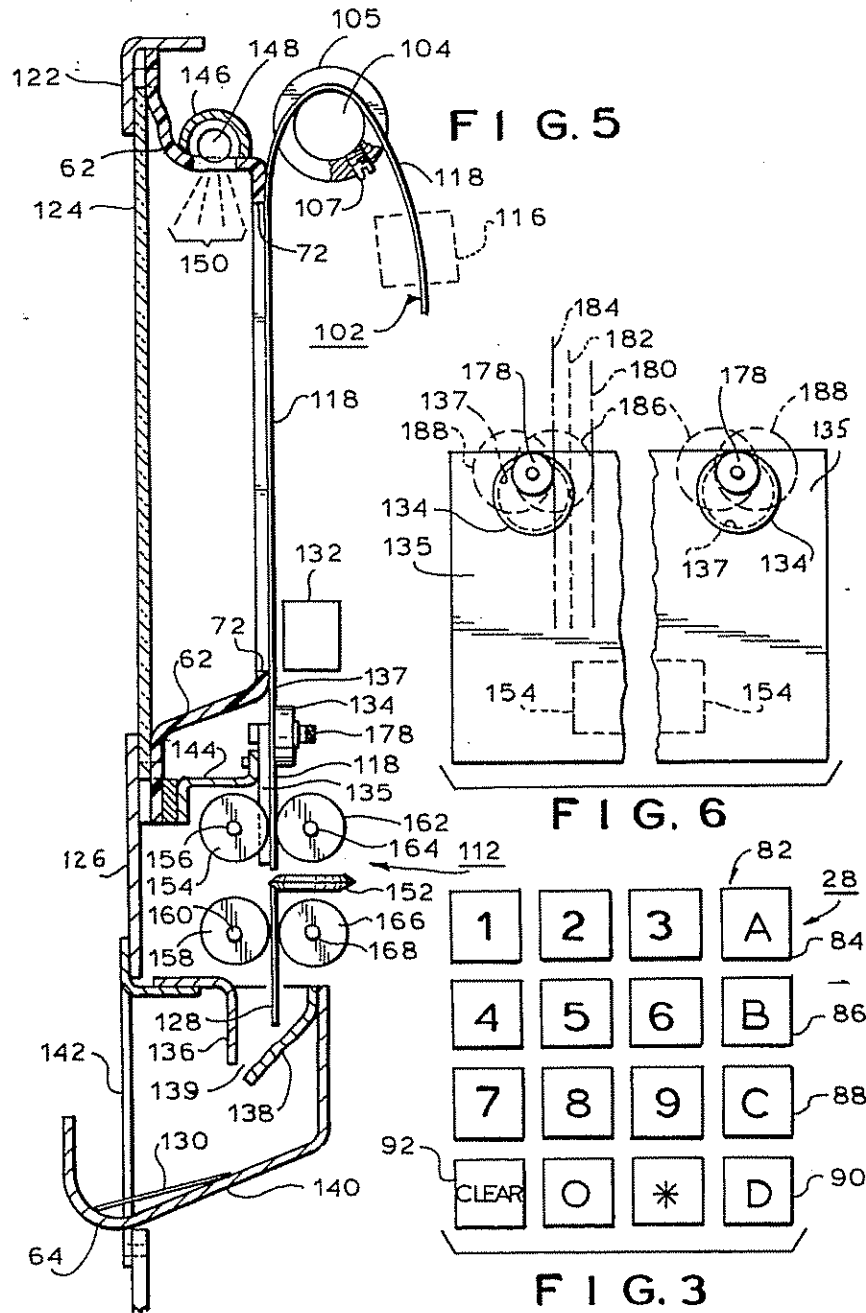
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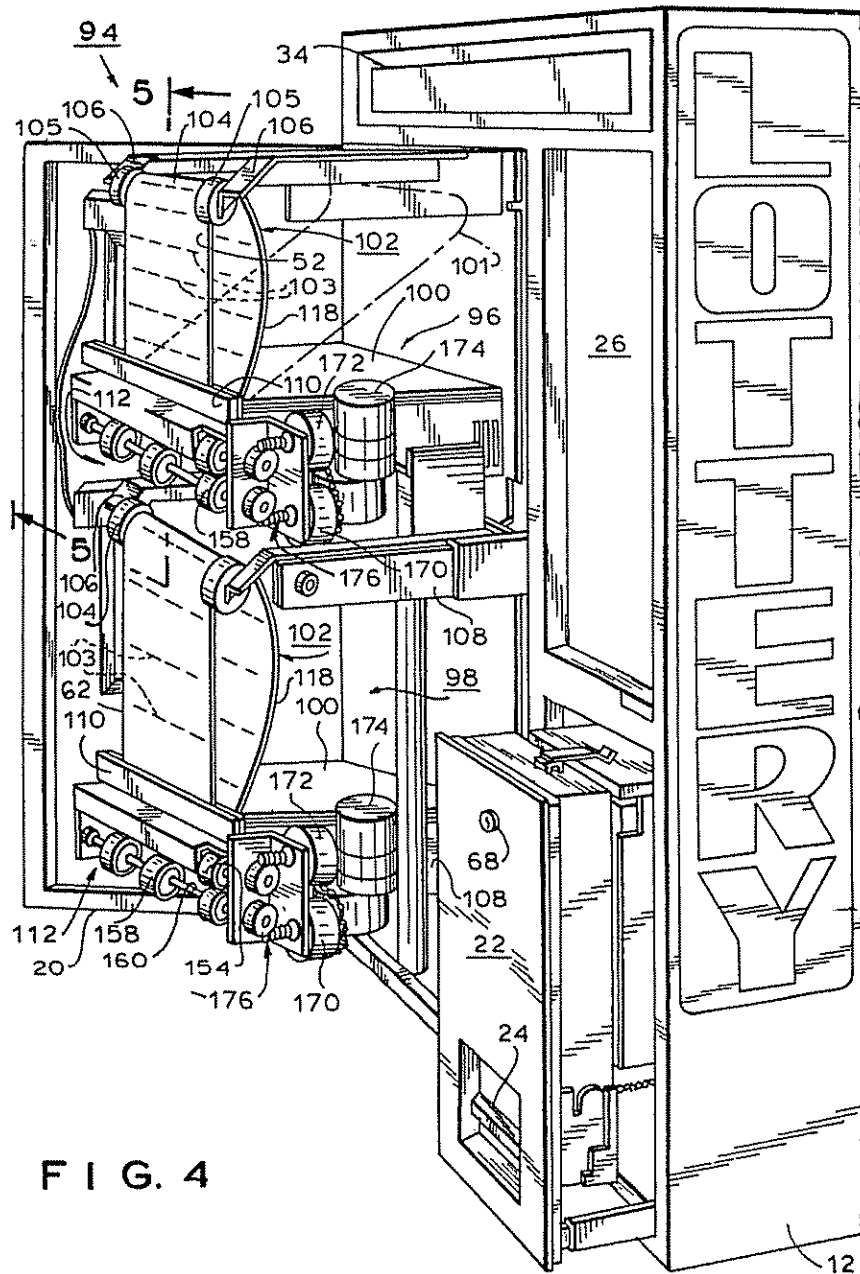


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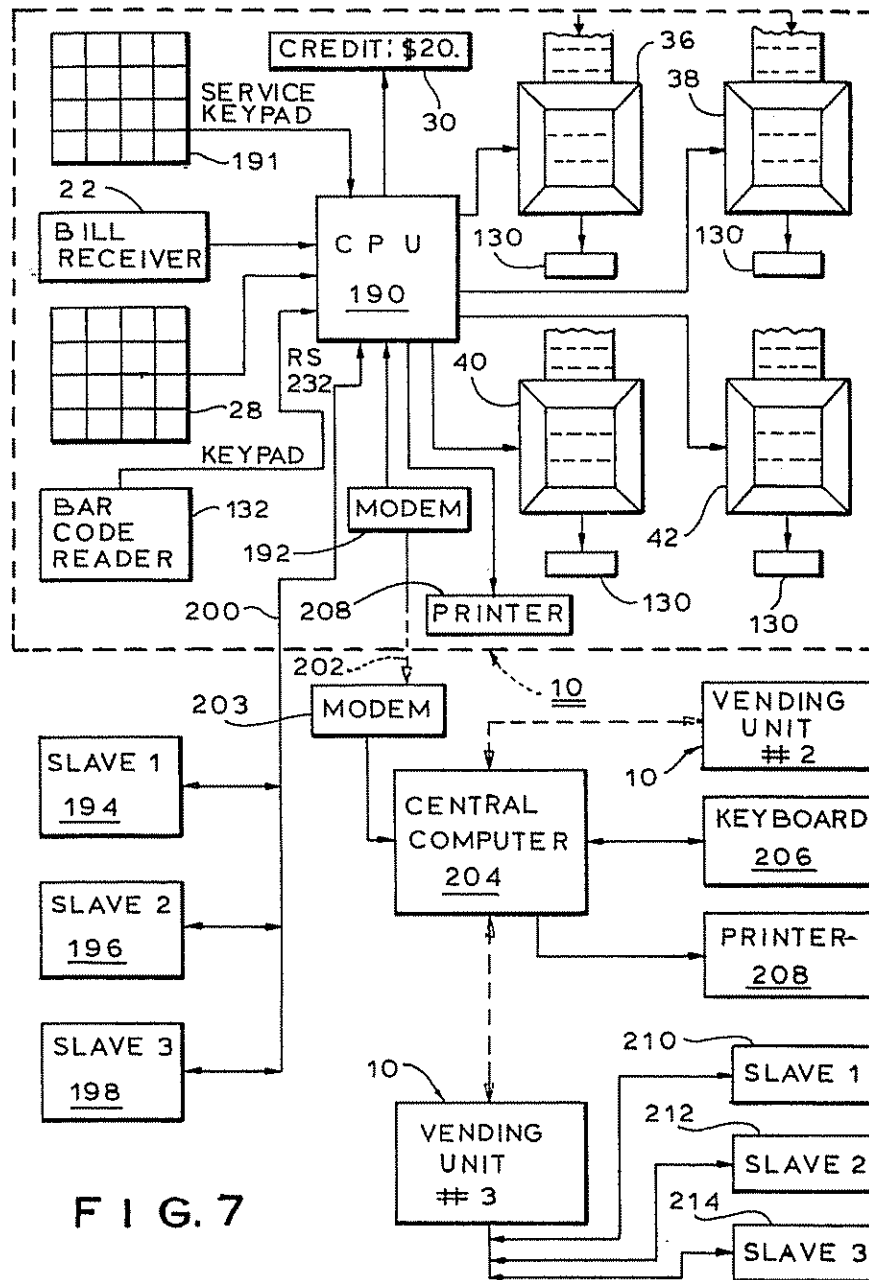


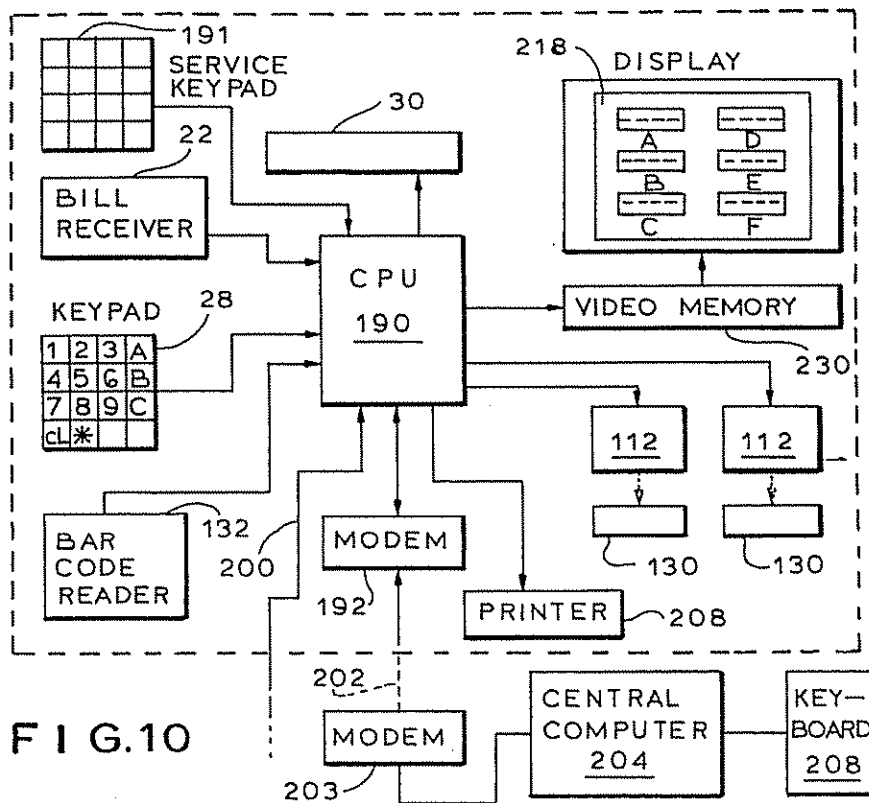
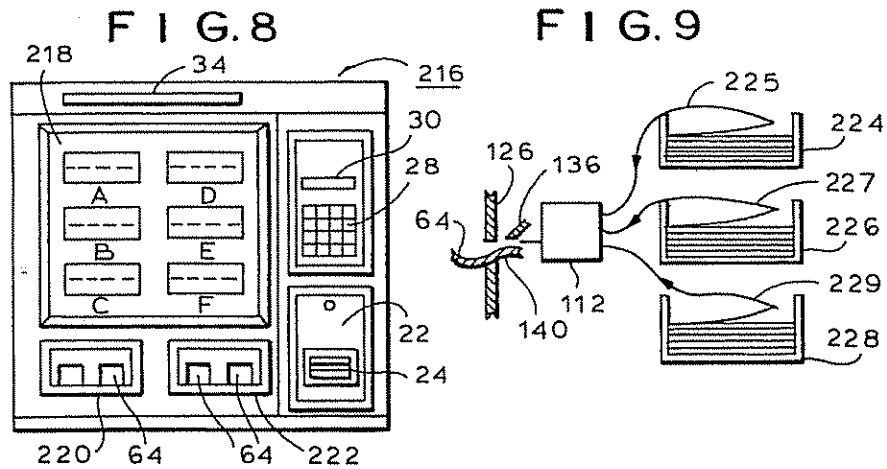
9/2,005













PTO UTILITY GRANT

Paper Number 20

The  
United  
States  
of  
America

The Commissioner of Patents  
and Trademarks

*Has received an application for a patent  
for a new and useful invention. The title  
and description of the invention are en-  
closed. The requirements of law have  
been complied with, and it has been de-  
termined that a patent on the invention  
shall be granted under the law.*

Therefore, this

United States Patent

*Grants to the person or persons having  
title to this patent the right to exclude  
others from making, using or selling the  
invention throughout the United States  
of America for the term of seventeen  
years from the date of this patent, sub-  
ject to the payment of maintenance fees  
as provided by law.*



*Michael R. Kirk*

Acting Commissioner of Patents and Trademarks

*Sandra L. Morton*  
Attest

PTO-1584

DSD



CHANGE OF CORRESPONDENCE ADDRESS

FOR PATENTS

Patent No. : 5222624  
Issue Date : 06/29/93  
Application No.: 912005  
Filing Date : 07/10/92  
First Named  
Inventor : BURR RL  
Case Number : 3345-2050

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FEB 20 1998  
PDS/PTCS

Assistant Commissioner for Patents  
Washington, D.C. 20231

Dear Sir:

Please change the Correspondence Address for this  
application to:

Gregor N. Neff, Esq.  
Whitman Breed Abbott & Morgan  
200 Park Avenue  
New York, New York 10166

Tele No.: (212) 351-3000  
Fax No. :

I am the attorney of record.

Typed or Printed

Name Gregor N. Neff , Reg. No. 20,596

Signature Gregor Neff

Date 1/1/98



DSΔ  
PATENT  
3345-2050

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : R. L. Burr  
Patent No. : 5,222,624  
For : Windows Ticket Dispenser  
Issued : 6/29/93

919 Third Avenue  
New York, NY 10022-3852

I hereby certify that this correspondence  
is being deposited with the United States  
Postal Service as first class mail in an  
envelope addressed to:  
Asst. Commissioner for Patents  
Washington, D.C. 20230

Gregor N. Neff - Registration No. 20,596  
Name of Applicant, Assignee or Registered  
Representative

*Gregor Neff*  
Signature  
10 April 01  
Date of Signature

NOTICE OF CHANGE OF ADDRESS

Assistant Commissioner for Patents  
Washington, D.C. 20231

Sir:

Please change the Correspondence Address for the  
application to:

RECEIVED  
APR 16 2001  
OIP/E/JCWS

PATENT  
3345-2050

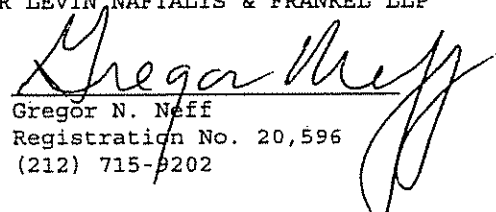
Gregor N. Neff  
Kramer Levin Naftalis & Frankel LLP  
919 Third Avenue  
New York, NY 10022-3852  
Direct Dial: 212 715 9202  
Facsimile: 212 715 8000

I am the attorney of Record.

Respectfully submitted,

KRAMER LEVIN NAFTALIS & FRANKEL LLP

By:

  
Gregor N. Neff  
Registration No. 20,596  
(212) 715-9202



PATENT APPLICATION FEE DETERMINATION RECORD						Application or Docket Number	
Effective December 16, 1991						07 / 912005	
<b>CLAIMS AS FILED - PART I</b>						<b>SMALL ENTITY OR OTHER THAN SMALL ENTITY</b>	
(Column 1)		(Column 2)		(Column 3)		(Column 4)	
FOR	NUMBER FILED	NUMBER EXTRA	RATE	FEE	RATE	FEE	
BASIC FEE				\$ 345.00		\$ 690.00	
TOTAL CLAIMS	24	minus 20 = 4	x \$10 =	40	x \$20 =		
INDEPENDENT CLAIMS	7	minus 3 = 4	x 36 =	144	x 72 =		
MULTIPLE DEPENDENT CLAIM PRESENT			+ 110 =		+ 220 =		
			TOTAL	529	OR TOTAL		
<p>* If the difference in column 1 is less than zero, enter "0" in column 2.</p>							
<b>CLAIMS AS AMENDED - PART II</b>						<b>SMALL ENTITY OR OTHER THAN SMALL ENTITY</b>	
(Column 1)		(Column 2)		(Column 3)		(Column 4)	
AMENDMENT A	CLAIMS REMAINING AFTER AMENDMENT	HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE	ADDITIONAL FEE	RATE	ADDITIONAL FEE
	Total	24	Minus 24	=	x \$10 =	x \$20 =	
	Independent	9	Minus 7	= 2	x 36 =	x 72 =	
	FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM			+ 110 =		+ 220 =	
			TOTAL		OR TOTAL		
<p>ADDIT. FEE</p>							
(Column 1)		(Column 2)		(Column 3)		(Column 4)	
AMENDMENT B	CLAIMS REMAINING AFTER AMENDMENT	HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE	ADDITIONAL FEE	RATE	ADDITIONAL FEE
	Total		Minus	=	x \$10 =	x \$20 =	
	Independent		Minus	=	x 36 =	x 72 =	
	FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM			+ 110 =		+ 220 =	
			TOTAL		OR TOTAL		
<p>ADDIT. FEE</p>							
(Column 1)		(Column 2)		(Column 3)		(Column 4)	
AMENDMENT C	CLAIMS REMAINING AFTER AMENDMENT	HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE	ADDITIONAL FEE	RATE	ADDITIONAL FEE
	Total		Minus	=	x \$10 =	x \$20 =	
	Independent		Minus	=	x 36 =	x 72 =	
	FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM			+ 110 =		+ 220 =	
			TOTAL		OR TOTAL		
<p>ADDIT. FEE</p>							
<p>* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.          ** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".          *** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".          The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.</p>							



[illegible]

POSITION	INIT.	DATE
CLASSIFIER		
EXAMINER		
TYPIST	388	7-28-92
VERIFIER	V42	7-29-92
CORPS CORR.		
SPEC. HAND		
FILE MAINT.		

## INDEX OF CLAIMS

Claim	Date
1	8/12/92
2	8/12/92
3	8/12/92
4	8/12/92
5	8/12/92
6	8/12/92
7	8/12/92
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Claim	Date
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## SYMBOLS

✓ ..... Rejected  
= ..... Allowed  
- (Through numbers) ..... Contested  
+ ..... No interest  
N ..... Non-checked  
I ..... Interference  
A ..... Appeal  
O ..... Objected

SEARCHED			
Class	Sub.	Date	Exmr.
221	1 2 3 8 9 10 13 25 26 30 92 123 124 129 131 155 191 194 195 206 217	8/10/92	DHB
235	375		
364	479		
some search updated		12/4/92	DHB

INTERFERENCE SEARCHED			
Class	Sub.	Date	Exmr.
221	1 2 8 13 25 124 129 155	12/11/92	DHB

SEARCH NOTES		
	Date	Exmr.

APPROVED FOR LICENSE ☐

INITIALS \_\_\_\_\_

07/912005

Entered  
or  
Counted

## CONTENTS

Received  
or  
Mailed

	1. Application _____ papers.	
13	2. <i>Re Amdt B</i>	<i>July 10/1992</i>
14	3. <i>Re Amdt C</i>	<i>July 10/1992</i>
15	4. <i>Ref 301 &amp; interview summary</i>	<i>SEP 14 1992</i>
16	5. <i>Declaration &amp; Exhibit</i>	<i>Oct. 5/1992</i>
17	6. <i>Amdt D</i>	<i>DEC 5/1992</i>
18	7. <i>Examiner's Amdt</i>	<i>12/14/92</i>
4/19/93	8. <i>Final drug costs (cost)</i>	<i>3/23/93</i>
20	9. <i>PTO GRANT JUN 9 1993</i>	
21	10. _____	
22	11. _____	
23	12. _____	
24	13. _____	
25	14. _____	
26	15. _____	
27	16. _____	
28	17. _____	
29	18. _____	
30	19. _____	
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32	21. _____	
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37	26. _____	
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39	28. _____	
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41	30. _____	
42	31. _____	
43	32. _____	

# EXHIBIT PP

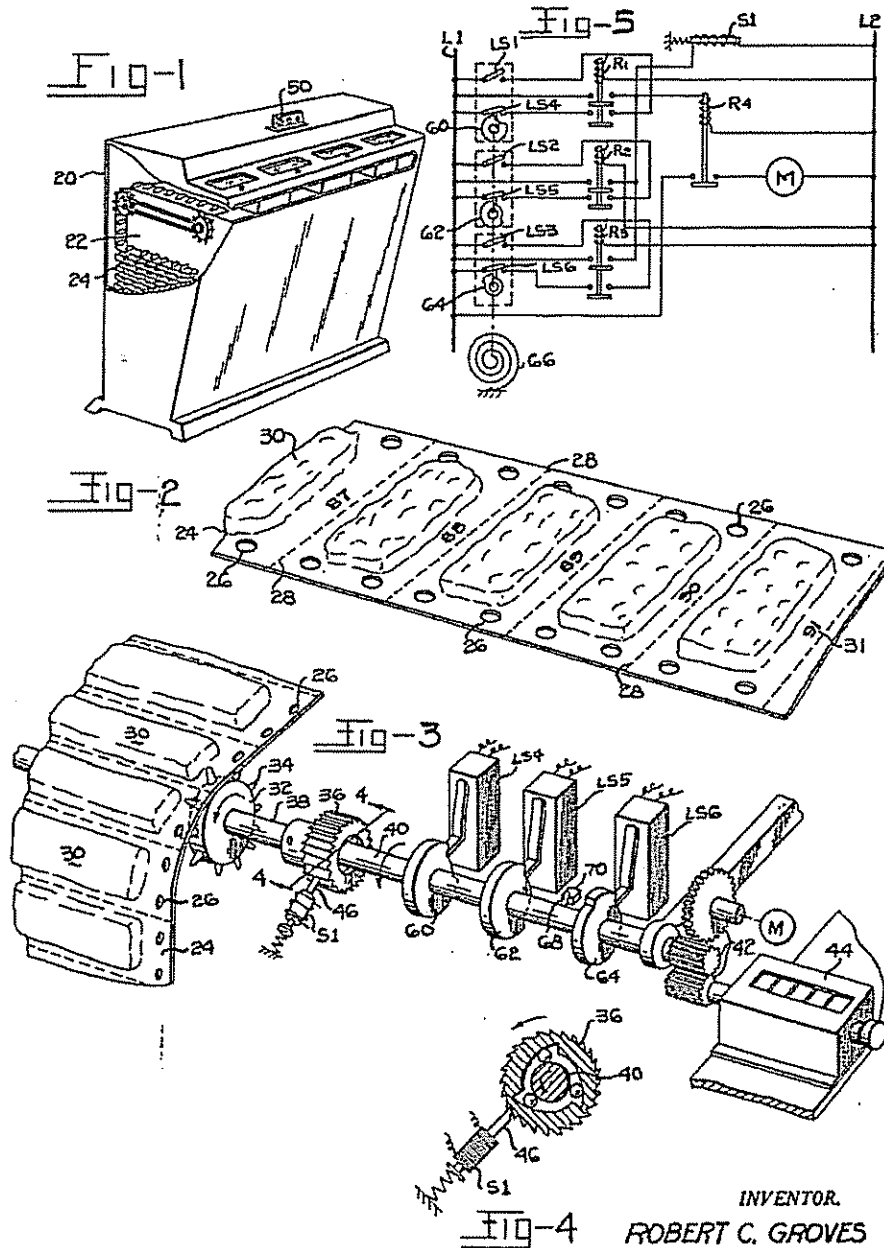
July 31, 1962

R. C. GROVES

3,047,347

CONTROLLING MOVEMENT OF ARTICLES

Filed April 25, 1955



INVENTOR.  
ROBERT C. GROVES  
BY *Toulmin & Toulmin*  
ATTORNEYS



## United States Patent Office

3,047,347

Patented July 31, 1962

1

3,047,347

**CONTROLLING MOVEMENT OF ARTICLES**  
Robert C. Groves, 335 Aberdeen Ave., Dayton, Ohio  
Filed Apr. 25, 1955, Ser. No. 503,769  
3 Claims. (Cl. 312-39)

This invention relates to the delivering of articles and the control thereof, and the automatic maintaining of records and accounting of the articles and material delivered.

In many dispensing, manufacturing, and packaging operations an important item of information which is desired to have available at any instant is the number of articles or amount of material that has been dispensed or handled up to a predetermined point, or the amount of material or number of articles remaining out of a given group yet to be dispensed or handled.

For example, in dispensing machines, which might dispense such articles as candy bars, or packages of cigarettes or the like, it would be convenient to inspect the machine and determine instantly the number of articles remaining to be dispensed.

In still other instances, as in the case of dispensing certain types of merchandise, nails for instance, it would be desirable, in order to eliminate expensive and time-consuming handling of such merchandise, to have a dispensing mechanism that could readily be adjusted to provide for the dispensing of a predetermined amount of the material being dispensed, with an accounting being kept of the amount dispensed and the amount yet remaining to be dispensed.

With the foregoing in mind, it is a primary object of the present invention to provide a method and apparatus for accomplishing the desirable results referred to above.

A particular object of this invention is the provision of a method and apparatus for maintaining a continuous inventory of material being dispensed from a dispensing device.

In general, the objectives of this invention are attained by utilizing a punched strip which is in positive engagement with a driving or driven member whereby the movement of the strip and movement of the member is positively correlated.

The punched strip is either in the form of a carrier of the articles or material being moved or dispensed, or may form a part of the said articles or material. The driving or driven member either drives the punched strip or is driven thereby, and in either case can be utilized for operating a counter or other quantity indicator, or for actuating a limit control which determines the amount of movement of the punched strip, or may be utilized for controlling the movement of another article or material which is to be combined with the articles or material associated with the punched strip.

The several objects and advantages of this invention will become more apparent upon reference to the following specification, taken in connection with the accompanying drawings, in which:

FIGURE 1 is a more or less diagrammatic perspective view showing a coin-operated dispensing device embodying the principles of my invention;

FIGURE 2 is a perspective view showing a carrier strip adapted for being handled in the dispensing device of FIGURE 1;

FIGURE 3 is a perspective view showing the driving device which drives the punched carrier strip of FIGURE 2;

FIGURE 4 is a section on line 4-4 of FIGURE 3 showing a one-way drive clutch forming a part of the drive train leading to the member which engages the punched carrier strip in FIGURE 3; and

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FIGURE 5 is a diagrammatic view of an electric control circuit adapted for being associated with the drive train of FIGURE 3.

Referring to the drawings somewhat in more detail, FIGURE 1 illustrates a dispensing device of the coin-operated type which is adapted for dispensing articles that are mounted on a punched carrier strip. Articles to be dispensed in this manner may comprise substantially anything of a size small enough to be packaged in continuous strips and of such a nature as to lend themselves to being dispensed in this manner.

In FIGURE 1 the device comprises a frame 20 having a compartment 22 therein, within which is disposed a plurality of strips 24 carrying the articles to be dispensed. Strips 24, as will be seen in FIGURE 2, are perforated along at least one side edge as at 26, and the carrier strip is also perforated by the perforations 28 at regular intervals between the articles 30 that are carried by the carrier strips. The carrier strip is preferably in the form of two webs or filaments, on which the articles are placed and with the webs or filaments being joined or sealed together between the articles and at their side edges, and with the perforations 28 extending across the sealed portions of the carrier strip.

According to this invention the carrier strip is provided with printed numbers or other indicia 31 thereon which indicate either the number of articles that have been dispensed from a strip or the number of articles yet remaining in a carrier strip to be dispensed. This enables the carrier strip to be made up in lengths of, say, 100 articles, and a cursory inspection of the dispensing device will, at any time, show whether or not it needs refilling.

According to this invention the perforations 26 along the side edges of the carrier strips 24, of which there may be several different types in the device of FIGURE 1, are utilized for driving the strips in the directions of their length to provide for the dispensing thereof from the device. An arrangement for controlling the movement of one of the strips is illustrated in FIGURE 3, with the electric control circuit therefor being illustrated in FIGURE 5.

In FIGURE 3 a pinwheel 32 having pins 34 engages the perforations 26 on one, or both, side edges of the particular carrier strip 24 so that rotation of pinwheel 32 will drive the carrier strip in the direction of its length.

It is preferred for the dispensing device of FIGURE 1 to be of the coin-operated type, and to this end automatic means are provided for rotating the pinwheel 32. This means takes the form of the one-way clutch 36 which connects shaft 38 of pinwheel 32 with shaft 40 which, in turn, is connected through gearing 42 with drive motor M and a counter 44.

The portion of clutch 36 that is connected with shaft 38 is provided with a notched periphery which is adapted for engagement by the latch member 46 which normally prevents rotation of the pinwheel in its dispensing direction, but which is adapted for being withdrawn by energization of solenoid S1 to permit rotation of the pinwheel. This prevents pulling of the carrier strip from the dispensing device manually.

The electric circuit for energizing motor M is illustrated in FIGURE 5. This circuit comprises means for selecting different amounts of rotation of motor M to provide for different lengths of dispensed carrier strips.

This is a desirable feature in a coin-operated dispensing device, because a coin drop as at 50 may be provided thereon for receiving coins of different denominations, which will bring about the dispensing of corresponding lengths of the carrier strip. Such a coin-operated device might be adapted for receiving coins of 5 cents, 10 cents, or 25 cents denominations.

The coin drop is arranged, according to conventional

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practices; for a 5 cent coin disposed therein to momentarily close a limit switch LS1; for a 10 cent coin disposed therein to momentarily close a limit switch LS2; and for a 25 cent coin disposed therein to momentarily close a limit switch LS3.

The limit switches have associated therewith the relays R1, R2, and R3, respectively, which close during the interval that the pertaining coin-operated limit switch is closed. Each of the said relays has a blade connected to energize a coil of the main relay R4 when closed and also energizes solenoid S1. Main relay R4 has a blade thereon for accomplishing the energization of motor M when the said relay is closed.

Each of relays R1, R2, and R3 has a holding circuit leading through a normally open blade of the retaining relay, and located in the circuits are the normally closed limit switches LS4, LS5, and LS6, respectively. These limit switches have associated therewith the cams 60, 62 and 64, respectively.

The cams are mounted on shaft 40 so that rotation of the shaft will rotate the cams. Each of the cams is provided with a raised portion and a valley, with the valleys differing in length so that each of the limit switches LS4, LS5 and LS6 will open in response to a different amount of angular movement of shaft 40; the smallest movement being required to open LS4; twice as much movement being required to open LS5; and five or six times as much movement being required to open LS6.

A preset torsion spring arrangement 66 is provided which, upon de-energization of motor M, will drive shaft 40 back to its starting position, at which time a stop pin 68 associated with the shaft strikes a stationary abutment 70. This will position the shaft so that each of the cams 60, 62 and 64 will have the actuating element of the pertaining limit switches LS4, LS5, or LS6 at the beginning of the valley portion thereof.

#### Operation of the Circuit of FIGURE 5

The operation of the circuit FIGURE 5 is as follows:

With the circuit at rest, solenoid S1 is deenergized and this permits latch member 46 to engage the ratchet wheel and to lock shaft 38 against forward rotation. The machine is placed in operation by inserting a coin in the coin receiver 50 and, depending upon the size of the coin, one of limit switches LS1, LS2 or LS3 will be closed. Depending on which one of the said limit switches are closed, one of relays R1, R2, or R3 will be closed. Whichever relay is closed, a holding circuit will be established therefor through one of its own blades while simultaneously, solenoid S1 will be energized to withdraw latch 46 and also relay R4 will be energized to close its blade which will cause energization of motor M. Energization of motor M will cause driving of shaft 40 and through the one way drive coupling, which includes the ratchet 36, will drive shaft 38. The amount of rotation imparted to the shafts will be determined by the actuation of the one of the limit switches LS4, LS5, and LS6 which pertains to the one of the limit switches LS1, LS2, or LS3 which was closed by the coin actuated device. When the pertaining limit switch is actuated, the holding circuit for the energized relay is opened and this will bring about de-energization of the relay while simultaneously the solenoid S1 will be deenergized and also the energizing coil of relay R4. The motor M is thus deenergized and the latch 46 is released to its latching position and the torsion spring 66 at that time will snap the shaft 40 back to its starting position, at which time finger 68 will engage stop 70. The counter 44 also embodies a one way drive so that it will register the amount of forward rotation of shaft 40 but will not be influenced by the reverse rotation thereof.

By the described arrangement there is provided a novel dispensing device for articles packaged according to my invention on continuous carrier strip means having one or more rows of perforations thereon, and with selective

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control being provided to determine the amount of movement of each carrier strip handled by the dispensing device. Each actuating mechanism for each carrier strip also includes a counter so that a continuous over-all indication of the number of each article dispensed is available.

The arrangement just described has the perforations along the strip varying in simple numerical ratio to the articles carried by the strip. In the strip illustrated in FIGURES 2 and 3 this numerical ratio is two perforations for each article. It will be apparent, however, that, in the interest of economy or to provide a compact strip which will require the minimum of storage space, the articles might be located on the strip in as close association as possible without regard to the maintaining of a simple numerical ratio between the number of articles and the number of perforations. In dispensing articles carried on strips of this nature it is necessary to provide for a length of feed of the carrier strip.

It will be understood that this invention is susceptible to modification in order to adapt it to different usages and conditions and, accordingly, it is desired to comprehend such modifications within this invention as may fall within the scope of the appended claims.

I claim:

1. In a dispensing device; a frame, a discharge opening therein, said device being adapted for feeding a tubular carrier strip within said frame through said discharge opening, said carrier strip having punched holes distributed uniformly along the length thereof, a driving pinwheel having pins adapted for engaging said series of punched holes, a motor for driving said pinwheel, a one-way drive between the motor and pinwheel, means for controlling the energization of said motor to control the feeding of said strip from said device, said last-mentioned means comprising a plurality of cam means connected with said motor to move in unison with the motor, a limit switch under the control of each said cam means, each switch being actuated by its respective cam means in a different rotated position of said motor, a relay pertaining to each switch, each switch being operable to deenergize its pertaining relay when actuated, each relay being connected with the motor so energization of any of the relays will energize the motor, coin-operated means for selectively energizing said relays thereby selectively making said limit switches effective for de-energizing said motor in response to a predetermined rotation, resilient means operable to return the motor to its starting position upon de-energization thereof, a latch normally effective to lock the pinwheel against rotation, and means connected to said relays operable automatically for making the latch ineffective when the motor is energized and effective when the motor is de-energized.

2. A dispensing device for dispensing tubular strips having uniformly spaced perforations along the side edges, a pinwheel drive member in the device engaging the said perforations, a motor for rotating the drive member, a plurality of cams driven by the motor so as to rotate in unison with the drive member, a one-way drive connecting the motor with drive member, a switch under the control of each said cam, each switch being actuated by its respective cam in a different rotated position of said motor, a relay in circuit with each switch adapted for being deenergized when the pertaining switch is actuated, means for selectively energizing said relays, each said relay being connected in circuit with said motor and being adapted when energized to cause energization of said motor, a latch normally engaged with said drive member operable for preventing forward rotation of said drive member, and means connected to said relays operable for withdrawing said latch from engagement with said drive member simultaneously with the energization of any of said relays.

3. A dispensing device according to claim 2 in which



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there is a counter connected with the cams to rotate there-with.

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# **EXHIBIT QQ**

**THIS EXHIBIT HAS BEEN REDACTED IN ITS  
ENTIRETY**

# **EXHIBIT RR**

**THIS EXHIBIT HAS BEEN REDACTED IN ITS  
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# **EXHIBIT SS**

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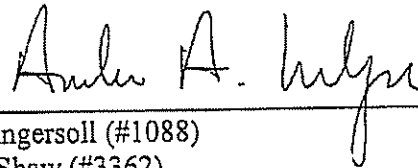
**CERTIFICATE OF SERVICE**

I, Andrew A. Lundgren, Esquire, hereby certify that on December 2, 2005, I caused to be electronically filed a true and correct copy of the foregoing document with the Clerk of the Court using CM/ECF, which will send notification that such filing is available for viewing and downloading to the following counsel of record:

Jack B. Blumenfeld Esquire  
Morris Nichols Arsht & Tunnell  
1201 North Market Street  
Wilmington, DE 19801

I further certify that on December 2, 2005, I caused a copy of the foregoing document to be served by hand delivery on the above-listed counsel of record.

YOUNG CONAWAY STARGATT & TAYLOR, LLP



Josy W. Ingersoll (#1088)  
John W. Shaw (#3362)  
Karen E. Keller (#4489)  
Andrew A. Lundgren (#4429)  
The Brandywine Building  
1000 West Street, 17th Floor  
P.O. Box 391  
Wilmington, Delaware 19899-0391  
(302) 571-6600  
[alundgren@vcst.com](mailto:alundgren@vcst.com)

*Attorneys for GTECH Corporation*



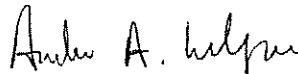
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YOUNG CONAWAY STARGATT & TAYLOR, LLP



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Josy W. Ingersoll (#1088)  
John W. Shaw (#3362)  
Karen E. Keller (#4489)  
Andrew A. Lundgren (#4429)  
The Brandywine Building  
1000 West Street, 17th Floor  
P.O. Box 391  
Wilmington, Delaware 19899-0391  
(302) 571-6600  
alundgren@ycst.com

*Attorneys for GTECH Corporation*